

# Republic of Zambia Ministry of Community Development Mother and Child Health

# External Assessment of the Baby-Friendly Health Facility Initiative in Five Districts



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## **Abbreviations**

**AIDS** Acquired Immune Deficiency Syndrome

ANC Antenatal care

**ARM** Artificial rupture of membranes

**ARV** Anti-retroviral **BF** Baby Friendly

**BFHFI** Baby Friendly Health Facility Initiative

BMS Breast milk substitutes
CBP Copperbelt Province

**CHPs** Community health promoters

DHO District Health OfficeDMO District Medical OfficeEBF Exclusive breastfeeding

**FP** Family planning

GMP Growth monitoring and promotion
HEBM Hand expression of breast milk
HIV Human Immunodeficiency Virus

HTC HIV testing and counselling

**IEC** Information Education and Communication

IYC Infants and young children

IYCF Infant and young child feeding

MCH Maternal and Child Health

MCHP Muchinga ProvinceMFC Mother friendly careMOH Ministry of Health

MTCT Mother-to-child transmission

NGO Non-Governmental Organization

**NP** Northern Province

NWP North Western ProvinceP&A Positioning and Attachment

**PMTCT** Prevention of mother-to-child-transmission of HIV

**PPS** Protect, promote and support breastfeeding

RHC Rural Health Centre
SCU Special care unit

**UNICEF** United Nations Children Fund

**USAID** United States Agency for International Development

WHO World Health Organization

**ZISSP** Zambia Integrated Systems Strengthening Program

**ZNS** Zambia National Service

## **Definition of Terms**

- **Antenatal care:** Care given to pregnant mothers before birth.
- **Baby-Friendly Hospital Initiative (BFHI):** A global movement spearheaded by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF); aims to give every baby the best start in life by creating a healthcare and community environment where breastfeeding is the norm.
- **Baby-Friendly Health Facility Initiative (BFHFI)**: This is an expansion of BFHI implementation into health centres with maternity facilities and in communities by volunteers trained in IYCF counselling and support.
- **Bedding in:** Mother and baby sleep in the same bed and are covered together with the same sheets and blankets.
- **Exclusive Breastfeeding (EBF):** Feeding an infant only on breast milk; no water, glucose, gripe water, cooking oil, infant formula, traditional drinks, thin porridge, or other semisolids should be given to the baby unless medically indicated.
- **HIV-negative**: Refers to people who have taken an HIV test and who know that they tested negative, or to young children who have tested negative and whose parents or guardians know the result.
- **HIV-positive:** Refers to people who have taken an HIV test and who know that they tested positive, or to young children who have tested positive and whose parents or guardians know the results.
- **HIV-infected:** Refers to people who are infected with HIV, whether or not they are aware of it.
- **HIV testing and counselling (HTC):** Testing for HIV status that is preceded and followed by counselling. Testing should be voluntary and confidential, with fully informed consent. If the client is pregnant or has recently given birth, it should include infant-feeding considerations.
- **Infant feeding counselling:** Counselling on breastfeeding, on complementary feeding, and, for HIV-positive women, on HIV and infant feeding.
- Mixed feeding: Feeding both breast milk and other foods or liquids.
- **Mother-to-child-transmission (MTCT) of HIV:** Transmission of the HIV virus from an infected mother to her child during pregnancy, labour and delivery or post-natally through breastfeeding.
- Non clinical staff: Support staff in health facilities who have contact with pregnant women, mothers and babies but who do not provide clinical care. These include ward and care attendants, clerical staff and community-based volunteers trained to work as health promoters, such as Infant and Young Child Feeding (IYCF) counsellors, safe motherhood promoters, counsellors for prevention of MTCT and Growth Monitoring and Promotion (GMP) providers.

**Postpartum care:** Care given to women soon after birth.

**Replacement feeding:** Feeding infants who are receiving no breast milk with a diet that provides the nutrients infants need until the age at which they can be fully fed on family foods.

**Skin-to-skin contact:** Substantial skin contact between the mother's and baby's bodies. For example, substantial contact is a baby lying unwrapped next to the mother's body, possibly with a sheet or blanket over both of them.

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# **Executive Summary**

The Assessment of the Baby-friendly Health Facility Initiative (BFHFI) in Zambia took place in five of the 27 districts supported by the Zambia Integrated Systems Strengthening Program (ZISSP). The districts included in the assessment were: Mbala in Northern Province, Mpika in Muchinga Province, Solwezi and Mwinilunga in North-western Province, and Masaiti in Copperbelt Province. These districts had been supported by ZISSP since 2011 in capacity-building for optimal Infant and Young Child Feeding (IYCF) practices at the facility and community level. The five districts were identified by ZISSP as IYCF target districts because of poor performance on indicators in nutrition and in under-five and maternal mortality. ZISSP support aimed to contribute toward improvements that further enable Zambia to reach the Millennium Development Goals on child and maternal mortality (goals number 4 and 5).

At facility level, ZISSP focused on strengthening the technical capacity of maternity staff to implement the Ten Steps to Successful Breastfeeding (as per the World Health Organization (WHO) and United Nations Children's Fund (UNICEF) in the Baby-Friendly Hospital Initiative (BFHI) guidelines), to comply with the International Code of Marketing of Breast-milk Substitutes, and to support optimal and safe feeding practices of infants born from HIV-infected mothers.

The purpose of the assessment was to assist the Ministry of Health (MOH), Ministry of Community Development Mother and Child Health (MCDMCH), and partners supporting the IYCF program to accelerate the scale up of the BFHFI strategy nationally. The objectives of the evaluation were the following: (1) To determine the progress of BFHFI implementation in the five selected districts, (2) To inform the MOH/MCDMCH to designate Baby-Friendly Health Facility (BFHF) status for facilities that meet the criteria, and (3) To use results to strengthen identified gaps and advocate for the scale up of the BFHFI strategy in other health facilities across the country.

Data were collected from 25 health facilities, selected on the basis of having previous capacity built to implement BFHFI steps. The *WHO/UNICEF Baby-Friendly Hospital Initiative External Assessors tools* (2009) were used for data collection. These are the standard tools used for monitoring and evaluation of health care practices in facilities implementing the BFHFI strategy.

Data gathering was in two parts. The first part consisted of individual interviews of heads and directors of maternity services, review of health facility data sheets and observations in maternity wards. Heads and directors of maternity services were interviewed on the policies and implementation of BFHFI activities. Data on number of deliveries, exclusive breastfeeding from birth to discharge and practices related to HIV and infant feeding were collected from existing facility records. Records on health worker trainings were reviewed to assess the extent of implementation of the *WHO Recommendations on Training for Breastfeeding Promotion and Support* (2010), trainings on support of non-breastfeeding mothers, and supply of breast-milk substitutes (BMS).

The observation and review of BFHI-related written materials collected information on the availability and contents of the BFHI policy of each facility and related protocols, curricula for trainings and course contents, and code of marketing of BMS. Observations included checking for display of policies in relevant areas such as maternity, special baby care units, maternal and child health (MCH) units, paediatric wards and outpatient departments. In addition, observations noted implementation of protocols related to specific BFHFI practices in labour, delivery and postpartum wards; code violations; replacement feeding demonstration spaces and items used for demonstrations.

The second part of data collection consisted of group interviews with clinical staff, non-clinical staff, mothers in postpartum wards, mothers of babies in special care units and pregnant women.

Respondents for the interviews were drawn from maternity wards and Maternal and Child Health (MCH) units. They included 25 heads of maternity units, 122 clinical staff, 136 non-clinical staff, 188 pregnant women, 122 mothers with well new-borns in post-partum wards, and ten mothers with babies in special care units (SCU).

Data entry and analysis were done using a BFHI computerized tool developed by WHO/UNICEF. A data summary tool consolidated information from the data collection tools used for each individual/group interview and observation. Data were collected over five days in each district and took place in May - June 2012.

The data analysis looked at the extent to which facilities had achieved each of the Ten Steps to Successful Breastfeeding (which are the criteria for being a BFHFI-designated facility), mother-friendly care (MFC) practices during labour and delivery, compliance with the code on BMS, and practices related to infant feeding by HIV-infected mothers to prevent mother-to-child transmission.

Findings indicated that none of the 25 facilities met the criteria to attain BFHF status. However, six facilities (24%) were close to meeting the criteria to attain the BFHF status (Luwi Mission Hospital (Mwinilunga District); Kanuma, Luamala and Kyafukuma health centres (Solwezi District); and Fiwale Mission Hospital and Mishikishi Health Centre (Masaiti District). These six facilities failed in between one to three of the steps in which they did not meet either one or more sub-parts of step(s). One of the six, Luamala Health Centre, failed only one step of few sub-parts of Step 1 on the policy. The other five facilities failed on two or three of a few subsets of the Ten Steps and/or on MFC or HIV and Infant Feeding. These facilities need to be supported to work on improvements for later reassessment only on those parts that they failed. The remaining 19 facilities (76%) would need substantial technical support to improve performance on the many steps that they failed.

All facilities (19 of 19) 100% assessed on Step 7 demonstrated optimal performance on rooming-in for mother and new-born 24 hours a day, while 88% (22 of 25 facilities) complied with the recommendation of not giving teats or pacifiers to breastfeeding infants (Step 9). In addition, 80% (20 of 25 facilities) comply with the code of marketing of BMS.

From the Ten BFHFI Steps and the three additional steps (on MFC practices, the BMS code compliance, and HIV and infant feeding), the assessed health facilities had, on average, poor performance in the following areas/steps: availability of infant feeding policy; training of health care staff; ensuring that pregnant women are aware of benefits of breastfeeding; practices on early initiation to breastfeeding; showing mothers how to breastfeed and encouraging breastfeeding on demand; establishing of community support systems; Mother Friendly Care practices and HIV and Infant Feeding (steps 1, 2, 3, 4, 5, 6, 8, 10). The assessment on HIV and infant feeding practices showed that conflicting messages on breastfeeding (such as abrupt cessation of breastfeeding at six months) continue to be communicated to mothers and the public.

Record keeping in maternity units was very poor, particularly for records on early initiation to breastfeeding, exclusive breastfeeding, and HIV-infected mothers in maternity wards. The number of babies born from HIV-infected mothers was usually not known.

Based on the findings of this assessment, the following recommendations were made:

#### National level recommendations to the MOH/MCDMCH:

- a. Reassess the six facilities that were close to attaining BFHFI status before certifying them as models for year 2012.
- b. Re-enforce the implementation of the BFHFI strategy nationally in health institutions at all levels and in community services.
- c. Use lessons learned from the assessment results and put in place mechanisms to scale up the implementation of BFHFI strategy in all health facilities and community services throughout the country.
- d. Institutionalize the BFHFI strategy into health systems for sustainability of activities, including regular assessments/re-assessment for accreditation and/or maintenance of BFHFI status in health institutions.
- e. Improve health centre staffing and ensure that a clinical staff is always available at the health centre.

- f. Disseminate updated national policy on HIV and infant feeding and, with MCDMCH, ensure that the policy is reinforced in all district health facilities and community services for harmonization of messages provided to mothers and communities.
- g. In collaboration with National Food and Nutrition Commission (NFNC), make BFHFI and related IYCF training materials available in all districts for training, supportive supervision, mentoring and monitoring of BFHFI activities.

#### **Facility level recommendations:**

- Partners supporting MOH/MCDMCH in IYCF programmes in facilities should provide technical support toward BFHFI activities to improve coverage and expand BFHI implementation.
- b. Health facilities should display policies and guidelines for implementation of the BFHFI strategy. Appropriate display areas include maternity services, paediatric wards, medical and surgical departments, under five clinics, outpatient departments and any other places at health facilities where mothers and infants are present.
- c. Relevant managers of health facilities should monitor documentation of infant feeding practices, as reflected on data sheets of maternity practices, to ensure that records pertaining to BFHFI Steps 4, 6 and 9 are documented.
- d. All clinical and non-clinical staff (including community workers) that has contact with pregnant women and mothers of infants and young children should be trained in BFHFI to support IYCF practices both at the facility and community levels.
- e. Community IYCF and the Baby-Friendly Health Community Initiative (BFHCI) should be rolled out in collaboration with other community based programs such as safe motherhood groups. This approach will complement efforts made at the facility level for continuum of care for mother-infant pairs upon their return home.
- f. Advocate for availability of information, education and communication (IEC) materials on IYCF for distribution to pregnant women and mothers.

# 1. Background

The Baby-Friendly Hospital Initiative (BFHI) is a global initiative of the World Health Organization (WHO) and UNICEF that aims to give every baby the best start in life by creating an environment that supports breastfeeding as the norm. The goal of the BFHI is to change hospital maternity facilities practices of distributing breast-milk substitutes (BMS) and to encourage practices that protect, promote and support breastfeeding. The BFHI uses implementation of Ten Steps to Successful Breastfeeding (listed in Section1.1) to measure the extent to which BFHI activities are implemented<sup>1</sup>.

The *International Code of Marketing of Breast-milk Substitutes* (adopted by WHO member states in 1981) and subsequent relevant World Health Assembly resolutions provide solid guidelines for protecting breastfeeding in health facilities that provide maternity services. Zambia is one of the member states.

In 1990, the Innocenti Declaration on the Protection, Promotion and Support of Breastfeeding was launched by WHO and UNICEF. This declaration laid the basis for the launching of BFHI. In response to the Innocenti Declaration, Zambia made significant strides, and by 1997 the country had 46 health facilities that had passed the Ten Steps criteria and attained Baby-Friendly status<sup>2</sup>.

As implementation progressed, BFHI lost momentum due to the advent of HIV transmission in breast milk. The 2003 report on the *Global Strategy for Infant and Young Child Feeding* (IYCF): Call to Action included revitalization of BFHI. The revitalization included expansion of BFHI to become the Baby Friendly Health Facility Initiative (BFHFI), which included implementation of Ten Steps and an additional three steps in maternity services provided in health centres and in community-related services. Between 2003 and 2009, the BFHI training materials and assessment tools were revised to incorporate evidence-based information on HIV and infant feeding. In 2010 WHO issued new recommendations on HIV and infant feeding to normalize breastfeeding in the context of HIV and AIDS.

In response to the global strategy on IYCF, Zambia revitalized BFHI in 2005 under Statutory Instrument 48 of the 2006 Food and Drug Act to regulate breast-milk substitutes. The National Food and Nutrition Policy and IYCF operational plan for 2006 - 2010 included the BFHI global strategy.

In the nine years after the first 46 hospitals with maternity services in Zambia attained Baby-Friendly status, there had been no additional hospital maternity facilities assessed. In 2008 an assessment on IYCF was conducted with financial and technical support from the WHO. In this assessment, an expansion of BFHFI was applied, meaning that the assessment was conducted both in hospital maternity settings and in health centre maternity services. After the 2008 IYCF assessment, a recommendation was made to revitalize BFHI in Zambia.

Based on the 2008 assessment recommendations, MOH in collaboration with UNICEF conducted a BFHFI assessment in November 2010 in selected health facilities in Eastern, Southern and Luapula provinces. The results showed that only a few facilities qualified in Southern Province and were yet to be given BHFHI recognition by MOH. The assessment found major gaps in the 2nd and 10th Step to successful breastfeeding.

The Zambia Integrated Systems Strengthening Program (ZISSP), a project funded by the United States Agency for International Development (USAID), supports MOH/MCDMCH in 27 districts on child survival programs. Since 2011, ZISSP has supported selected health facilities and their communities in five of the program's 27 districts in capacity-building for facility and community based IYCF with integration of Growth Monitoring and Promotion (GMP) activities. These five districts are Mbala (Northern Province), Mpika (Muchinga Province), Solwezi and Mwinilunga

<sup>&</sup>lt;sup>1</sup> Ten Steps is a measure of the "friendliness" of the facility. Friendliness is the term used to describe the process that supports a mother to have easy access to and be close to the baby and to comfortably and frequently breastfeed <sup>2</sup> Zambia Infant and Young Child Feeding Report June 2009

(North-western Province), and Masaiti (Copperbelt Province). The five districts were identified by ZISSP as IYCF target districts because of poor performance on indicators in nutrition and under-five and maternal mortality.

Major nutrition problems among Infants and Young Children (IYC) in Zambia include stunting, which is at 45 per cent, underweight at 15 per cent and wasting at 5 per cent<sup>3</sup>. These problems are the underlying causes of high infant and under five mortality rates, which are 70 and 119 per 1,000 live births respectively<sup>4</sup>. Contributory factors to malnutrition are poor maternal nutrition and inappropriate feeding practices of IYCF in the first two years of a child's life. Recommended feeding practices include exclusive breastfeeding for the first six months and introduction to nutritionally-adequate complementary feeding with continued breastfeeding up to the first two years of a child's life. On breastfeeding practices, the Zambia Demographic and Health Survey (2007) showed that early initiation to breastfeeding is 57 per cent, while exclusive breastfeeding for the first six months is 61 per cent. However, continued breastfeeding for the first two years of a child's life is only 42 per cent.

Within this context, ZISSP undertook activities to provide technical support and build capacity in optimal IYCF practices at health and community level to contribute to improved feeding practices using BFHFI strategy. It was hoped that the community component approach would strengthen the linkages with breastfeeding promotion at health facilities.

## 1.1 Ten Steps to Successful Breastfeeding

The Ten Steps to Successful Breastfeeding were developed by WHO/UNICEF to measure the extent to which BFHI activities are being implemented. Every facility providing maternity services and care for new-borns should:

- 1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
- 2. Train all health care staff in skills necessary to implement this policy.
- 3. Inform all pregnant women about the benefits and management of breastfeeding.
- **4.** Help mothers initiate breastfeeding within a half-hour of birth.
- 5. Show mothers how to breastfeed, and to maintain lactation when separated from an infant.
- 6. Give new-born infants no food or drink other than breast milk, unless medically indicated.
- 7. Practice rooming-in; allow mothers and infants to remain together 24 hours a day.
- **8.** Encourage breastfeeding on demand.
- 9. Give no artificial teats or pacifiers to breastfeeding infants.
- **10.** Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

## 1.2 Expanded Baby-Friendly Health Facility Initiative

The Baby-Friendly Health Facility Initiative (BFHFI) integrated the following three components:

- 1. Compliance with the International Code of Marketing of Breast-Milk Substitutes
- 2. Mother-friendly care (MFC) practices during labour and delivery
- 3. HIV and infant feeding, which covers the prevention of mother-to-child transmission of HIV (PMTCT) through breastfeeding

<sup>&</sup>lt;sup>3</sup> Central Statistical Office (CSO), Ministry of Health (MOH), Tropical Diseases Research Centre (TDRC), University of Zambia, and Macro International Inc. 2009. *Zambia Demographic and Health Survey 2007*. Calverton, Maryland, USA: CSO and Macro International Inc.

<sup>4</sup> Ibid

## 1.3 Objectives of the 2012 Assessment

In 2012, ZISSP undertook an assessment in five districts to assist the Ministry of Health (MOH), Ministry of Community Development Mother and Child Health (MCDMCH) and partners supporting the IYCF program to accelerate the national scale up of the BFHFI strategy.

The objectives of the evaluation were the following:

- 1. To determine the progress of BFHFI implementation in the five selected districts,
- **2.** To inform the MOH/MCDMCH to designate Baby-Friendly Health Facility (BFHF) status for facilities that meet the criteria, and
- **3.** To use results to strengthen identified gaps and advocate for the scale up of the BFHFI strategy in other health facilities across the country.

# 2. Methodology

## 2.1 Types of Health Facilities in Zambia

This section provides an overview of different levels of service provision in health facilities in Zambia.

Zambia consists of ten provinces and 88 districts. Seventy-nine per cent of health services are provided by government institutions, 14 per cent by private institutions and 7 per cent by faith-based organizations. The National Health Strategic Plan (2006-2010) defines the framework within which both public and private service delivery is organized, based on the Zambia Basic Health Care Package<sup>5</sup>. There are 1,882 health facilities in the country organized in a system which comprises five levels of health care (Table 1).

Table 1: Levels of Health Facilities in Zambia, inclusive of all sectors (GRZ, private, etc.)

Health Care Level	Type of Health Facility	No. of facilities	Population of administrative units served
I	Third level hospitals: Specialist or Tertiary Hospitals	6	800,000 and above
2	Second level referral hospitals: Provincial Hospitals, which serve as referrals for the first level hospitals and provide technical back-up and training functions	21	200,000 to 800,000
3	First level referral hospitals: District Hospitals, which support health centre referrals	84	80,000 to 200,000
4	Health Centres , which provide basic curative and MCH/FP and largely preventive services		
4.1	Urban health centres (UHC)	436	30,000 to 50,000
4.2	Rural health centres (RHC)	1,060	10,000
5	Health Posts for basic first aid (they refer clients to health centres for curative care)	275	3,500
	Total number of facilities	1,882	

5

<sup>&</sup>lt;sup>5</sup> CBoH et al 2003

#### 2.2 Districts and Health Facilities Included in the Assessment

The Assessment of BFHFI in Zambia took place in five of 27 districts supported by ZISSP. The five districts were identified by ZISSP as IYCF target districts because of poor performance on indicators in nutrition and in under-five and maternal mortality. The ZISSP support aimed to contribute to improvements that will allow Zambia to reach the Millennium Development Goals on child and maternal mortality (goals number 4 and 5).

The five selected districts have 165 health facilities: 22 health facilities in Mbala, 31 in Mwinilunga, 59 in Solwezi, 32 in Mpika, and 21 in Masaiti District. These included first and second level hospitals with capacity ranging from 80 to 250 beds. Each of the five districts covered by this assessment had varying types of health facilities, ranging from district hospitals to health posts. ZISSP conducted capacity-building to implement the BFHFI strategy in a total of 25 facilities (five facilities per selected district). Table 2 summarizes details on these 25 facilities included in the assessment.

Table 2: Health Facilities Included in the Assessment

District and no. of health facilities	Facility included in the assessment	Type of facility	Owner	No. of Beds	No. of Cots	Distance from DHMT (km)
Mbala (22 for this )	Mbala General Hospital	2 <sup>nd</sup> level	GRZ	250	50	1.5
(22 facilities)	Nondo	RHC	GRZ	12	0	93
	Senga	RHC	GRZ	3	0	68
	Kawimbe	RHC	GRZ	26		23
	Tulemane	RHC	GRZ	8	0	3
Mwinilunga	Mwinilunga District Hospital	I <sup>st</sup> level	GRZ	80	10	Within DHMT
(31 facilities)	Kaleni Hospital	I <sup>st</sup> level	Mission	150	10	85
	Kanyama	RHC	GRZ	15	2	67
	Lumwana West	RHC	GRZ	8	0	92
	Luwi Hospital	I <sup>st</sup> level	Mission	21	4	52
Solwezi	Kyafukuma	RHC	GRZ	23	3	40
(59 facilities)	Luamala	RHC	GRZ	4	0	50
	Kanuma	RHC	GRZ	10	0	67
	Solwezi General Hospital	2 <sup>nd</sup> level	GRZ	250	40	I
	Solwezi Urban	UHC	GRZ	10	0	I
Mpika	Chalabesa	RHC	Mission	30	0	100
(32 facilities)	Chilonga Hospital	I <sup>st</sup> level	Mission	122	20	28
	Libunga	RHC	GRZ	9	0	128
	Mpika District Hospital	I <sup>st</sup> level	GRZ	106	6	0.2
	ZNS (Defence)	RHC	GRZ	I	0	20
Masaiti	Chikumbi	RHC	GRZ	3	0	88

District and no. of health facilities	Facility included in the assessment	Type of facility	Owner	No. of Beds	No. of Cots	Distance from DHMT (km)
(21 facilities)	Fiwale	RHC	Mission	48	8	40
	Kafulafuta	RHC	GRZ	35	4	18
	Masaiti Council clinic	RHC	GRZ	0	0	8
	Mishikishi	RHC	GRZ	28	4	63

DHMT= District Health Management Team GRZ = Government of the Republic of Zambia

#### 2.3 Assessment Team

ZISSP, in liaison with the MOH National Chief Nutritionist, drew up a team of assessors who had already been trained earlier by MOH and UNICEF as assessors in BFHFI using the WHO/UNICEF assessment standards.

The assessment team included individuals at the national, provincial and district level with backgrounds including medical professionals, PMTCT providers, nutritionists and nurses and midwives from organizations such as the World Health Organization, International Baby Food Network Action Africa and the IYCF technical working group. These team members were all Zambian nationals drawn from government and non-governmental organizations within the country. The team was split in several groups who visited separately each of the study districts to conduct interviews and collect data.

The MOH Department of Nutrition referred to this team as "external assessors" because none of the team members worked on the BHFHI in the districts and facilities that they assessed.

#### 2.4 Data Collection

In all BFHI activities, WHO/UNICEF set standards for training materials and developed tools for monitoring and evaluation of the activities. Zambia's MOH adopted these tools for the county's BHFHI. Therefore, the WHO/UNICEF assessment tools<sup>6</sup> were used for data collection and analysis.

Data gathering was in two parts. The first part consisted of individual interviews of heads and directors of maternity services, review of health facility data records, and review and observations of relevant policies and protocols in maternity wards:

- Heads/directors of maternity services were interviewed on the policies and implementation of BFHFI activities.
- Health facility data sheets were used to collect data on number of deliveries, exclusive breastfeeding from birth to discharge, and practices related to HIV and infant feeding. These data were collected from existing facility records.

The review and observation of BFHFI-related written materials assessed availability and contents of the BFHFI policy of each facility and related protocols, curricula for trainings and course contents, and code of marketing of BMS. Observations included checking for display of policies in relevant areas such as maternity, special baby care units, maternal and child health (MCH) units, paediatric wards and outpatient departments. In addition, observations were used to note implementation of protocols related to specific BFHFI practices in labour, delivery and postpartum wards; code violations; replacement feeding demonstration spaces; and items used for demonstrations. Records on health worker trainings were reviewed to assess the extent of implementation of the *WHO* 

<sup>&</sup>lt;sup>6</sup> UNICEF/WHO. (2010). Baby-Friendly Health Facility Initiative; Revised, updated and expanded for Integrated Care. (Adapted from BFHI guidelines of 1992). http://www.who.int/nutrition/publications/infantfeeding/9789241594950/en/index.html

Recommendations on Training for Breastfeeding Promotion and Support (2010), trainings on support of non-breastfeeding mothers, and supply of breast-milk substitutes (BMS).

The second part of data collection consisted of group interviews with clinical staff, non-clinical support staff, mothers in post-partum wards, mothers of sick new-borns in special care units and pregnant women. These interviews provided information on the extent to which staff implemented the activities required under the BFHFI steps and provided insights on the experience of the beneficiaries of maternity services.

## 2.5 Sampling of Respondents

For the second part of data collection, the 2010 UNICEF/WHO BFHI External Assessment Tool (a guide best-suited to conducting such assessment in large facilities and hospitals) requires that the following respondents are interviewed in each hospital:

- **Professional (clinical) staff**: Ten to 30 respondents from the pool of staff who take care of pregnant women, mothers and babies. The staff includes midwives, nurses, clinical officers, and doctors who work in antenatal, labour and delivery areas, postpartum wards and special baby care units. Dieticians or nutritionists, medical students, and nursing aides are also part of this staff as they provide clinical care.
- **Non-clinical staff:** Five to ten respondents from the pool of staff who have contact with pregnant women, mothers and babies but who do not provide clinical care. These include ward and care attendants, clerical staff, and community based volunteers such as promoters of IYCF and safe motherhood, health promoters, PMTCT and GMP volunteers.
- **Post-partum mothers:** Fifteen to 30 respondents, including postpartum mothers with vaginal births and with Caesarean deliveries, all with well babies at least 32 weeks gestation at birth, who have given birth at least six hours prior to the assessment, and who are as close to discharge as possible so as to have received all counselling and instruction related to infant feeding.
- Mothers with babies in special care: Five to ten respondents selected from babies at least six hours old and/or in the facility for at least this amount of time if they are transferring in from another facility, or following home deliveries.
- **Pregnant women:** Ten to 20 respondents selected from those in their third trimester who have completed at least two prenatal visits, so that they would have had a chance to receive all or most of the breastfeeding and infant feeding-related counselling that should be given during antenatal services.

The WHO/UNICEF guidelines specify that respondent selection should be done using random sampling, whereby the assessment team should request the staff in charge of the health facility to prepare a list of all staff and mothers currently on the wards in the categories of respondents listed above. The mothers' list should include date, time, and type of delivery. Assessors should review these lists and reduce the list to only those who are eligible respondents (as per the criteria described above). These reduced lists are then numbered and respondents are drawn out from them at random until the required number within each group is selected.

However, the WHO/UNICEF guidelines recognize that in some facilities not all types of respondents can be found, or there may be less than the recommended number. The guidelines suggest some adaptations to the sample selection in such cases; e.g., if there is no special care unit, and there is a sick baby that is kept with the mother in a general maternity ward, then this situation can be observed for that category.

In the external BHFHI assessment in Zambia, even in the larger hospitals, the assessment teams found very few staff members of the types eligible for the survey on duty. The number of such staff ranged only between one and three. In some of the rural health centres there were no staff eligible for participation in the survey at time of visit or at all. Therefore, in each facility the assessment teams interviewed all eligible staff who was found on duty at the time of visit.

Similarly, in each of the hospitals the number of mothers and pregnant women was much lower than the sample required by the WHO/UNICEF guidelines. As shown in Table 2, some of the health centres had very few or no beds/cots. Therefore, all women eligible for the survey who were found at the facilities at time of visit were interviewed.

The assessment teams did not conduct return visits to any of the facilities to obtain a larger sample of respondents because return visits were not included in the time allocation and budget.

Table 3 shows the resulting number of respondents interviewed in each district. In Masaiti, where ZISSP only supported rural health centres, the number of respondents across all health facilities was very low.

**Mothers** with Heads of Non-Mothers of Clinical well babies in **Pregnant District** maternity clinical babies in **Total** staff post-partum women services **SCU** staff ward Mbala 4 22 27 35 ı 63 152 4 25 44 2 32 **M**pika 24 131 Mwinilunga 4 23 28 8 0 27 90 7 Solwezi 5 43 39 33 55 182 5 9 18 2 0 П 45 Masaiti 22 122 All survey 122 136 10 188 600 districts

**Table 3: Number of Respondents by District** 

## 2.6 Data entry and analysis

Data entry and analysis were done using a BFHFI Assessment Computerized Tool developed by WHO/UNICEF<sup>7</sup>. The tool provided instructions on how to enter and analyse the data and provided results on the BFHFI status ("Pass" or "Fail") for each facility. Results from the reviews of all individual health facilities included in this assessment are in Annex 5.

Because the WHO/UNICEF tool and BFHFI status that it measures for an individual facility are better suited to hospitals (or very large health facilities), there were limitations in applying the tool to the much smaller facilities in this assessment. For example, a facility would often not have any relevant respondents for BFHI tool categories to allow for assessing facility compliance with certain BFHFI steps. The WHO/UNICEF tool was adapted by the assessment team for some questions by collecting the necessary information using different methods. For example, when no mothers with babies recently-delivered at the facility were present at time of visit to a facility, the assessment instead used information provided by facility staff for some steps as a substitute to the information that should be provided by mothers (this was usually done with steps with simpler and fewer items that required responses by mothers).

<sup>&</sup>lt;sup>7</sup> Section 5: Internal Assessment and Re-Assessment includes a BFHI Assessment Computer Tool to use in scoring and presenting assessment results For more information, go to

http://www.who.int/nutrition/publications/infantfeeding/9789241594950/en/index.html

### 2.7 Limitations of the Assessment

The following limitations that should be noted, so that the results of the assessment can be interpreted accordingly:

- The selection of the districts is not reflective of the average for the country. Therefore, the results should not be treated as nationally representative.
- The number of clinical staff and mothers for data collection was very small in health centres. This limits generalization of results for each facility assessed.
- Weak coordination between district staff and health facility resulted in the assessment team
  arriving on dates when mothers were not available for assessment activities. This affected the
  number of pregnant women and mothers to be interviewed.
- In a number of health centres, key health personnel to interview were out of station and no hand over was given to staff on duty. This led to the delays in collecting needed information.

# 3. Findings

This section first presents the findings on the Ten Steps to Successful Breastfeeding, followed by the results on the additional three components of expanded BFHFI (the integrated components on the BMS marketing code, MFC, and HIV and infant feeding).

## Part A. Findings: Ten Steps to Successful Breastfeeding

The Ten Steps to Successful Breastfeeding measure the extent to which BFHFI activities are being implemented. This section describes the criteria for achieving each step by an individual facility, summarizes the results for each step by district and how many facilities "passed" the step (i.e. complied with the criteria for achieving the step), and suggests recommendations for actions at the facility and DHO levels. The findings for each of the steps for individual health facilities are presented in Annex 5.

# **Step 1: Written Breastfeeding Policy that Is Routinely Communicated to All Healthcare Staff**

A written breastfeeding policy provides a course of action and guidance in the implementation process and therefore helps to establish consistent care for mothers and babies. It further provides a standard that can be evaluated and empowers health care providers to implement prescribed guidelines.

To pass this step, a facility must have a written breastfeeding policy that covers the following six areas:

- 1. Existence and availability of a written policy.
- 2. The policy covers the Ten Steps to Successful Breastfeeding as per WHO standards.
- **3.** The policy upholds the *International Code of Marketing of Breast-milk Substitutes*, which prohibits:
  - The display of posters or other materials provided by manufacturers or distributors of breastmilk substitutes, bottles, teats and dummies or any other materials that promotes the use of these products.
  - Any direct or indirect contact between employees of these manufacturers or distributors and pregnant women or mothers in the facility.
  - Distribution of samples or gift packs with breast-milk substitutes, bottles or teats or of
    marketing materials for these products to pregnant women or mothers or members of their
    families.
  - Acceptance of free gifts including food items, literature, materials, equipment, money, or support for in-service education or events from these manufacturers or distributors by the hospital.
  - Demonstrations of preparation of infant formula for anyone that does not need them.
  - Acceptance of free or low cost breast-milk substitutes or supplies.
- **4.** The policy covers MFC practices.
- 5. The policy covers counselling of HIV positive mothers on infant feeding options. Counselling has to include information about benefits and risks of various feeding options, provide specific guidance for the chosen option and support the mother on the feeding option of choice.

**6.** The summary of the policy has to be written in a language(s) with wording most commonly understood by both mothers and staff.

In addition, the policy must be displayed in areas where relevant staff can access it. Areas for display of the policy include labour and delivery areas, antenatal inpatient wards, antenatal clinics/consulting rooms, postpartum wards, well baby observation areas, special baby care units, paediatric wards, outpatient clinics, consultation rooms and any other areas where pregnant women and mothers with infants and young children are found.

Findings showed that 28 per cent of the 25 facilities (7 of 25) passed Step 1.

- 72 per cent (18 of 25) facilities had a written policy that contained the required six elements.
- 28 per cent (7 facilities) had a written policy that was also appropriately displayed (all five health facilities in North-western Province and two health facilities in Masaiti District (Fiwale Rural Hospital and Mishikishi Health Centre).

### **Step I: Recommendations**

At health facility level, the heads of maternity services should:

- a. Formulate the IYCF policy as per MOH/MCDMCH standard and in line with the criteria set up.
- b. Translate the policy in a language(s) that is commonly understood by mothers, community and staff
- c. Ensure that the policy is displayed in all areas where pregnant women and mothers of infants and young children are found
- d. Ensure that protocols are displayed in key strategic areas where pregnant women and mothers are found. Protocols should be specific for each key strategic area. For example in ANC clinics and ANC wards, Step 3 would be the specific protocol to prepare pregnant women in BFHFI practices, while Steps 4, 5, and 6 are specific for labour and delivery and postpartum wards.
- e. Ensure that there is on-going reorientation on the policy for clinical and non-clinical staff working in strategic areas where pregnant women and mothers of infants and young children are found.

District Health Offices should:

a. Provide the standard IYCF policy for their health facilities

# STEP 2: TRAIN ALL HEALTHCARE STAFF IN SKILLS NECESSARY TO IMPLEMENT THE INFANT FEEDING POLICY

Training of the health care staff in skills necessary to implement the infant feeding policy is the second of the Ten Steps to Successful Breastfeeding. Step 2 has the following components that a facility must pass in order to attain this step:

Interview with head/director of maternity services should indicate that:

- 1. Orientation on the policy is given to all staff members who have contact with pregnant women, mothers and/or infants and babies when they begin employment.
- 2. This staff orientation, as described, is considered by the assessment team as sufficient.

Review of written materials should show that:

- 3. A written curriculum for training in breastfeeding promotion and support is available.
- 4. The training curriculum or course covers the Ten Steps and the BMS Code adequately
- 5. Training curriculum and attendance sheets indicate that at least 80 per cent of the clinical staff members responsible for the care of pregnant women, mothers and infants are given training of at least 20 hours in length and three hours of supervised clinical experience.
- **6.** Training for non-clinical staff on breastfeeding is adequate
- 7. There is a curriculum for training on supporting HIV infected mothers who may opt not to breastfeed. The curriculum should cover risks and benefits of various options.

Interviews of clinical and non-clinical staff should show that:

**8.** At least 80% of the staff has been trained to implement the policy, and each of the trained staff scored at least 80% to a set of questions on the BFHFI during interviews.

The findings showed that only 12 per cent (3 of 25) facilities (Kanuma, Kyafukuma and Luamala in Solwezi District) met all the criteria on training of clinical staff and passed Step 2.

Facilities were at various levels of implementation of this step at the time of the assessment. The number of healthcare staff trained to implement BFHFI was low, particularly in health centre settings where staffing is very poor.

Below are further details on the performance of facilities for various criteria for Step 2:

**Orientation on the policy:** In the 25 health facilities sampled, 22 heads of the maternity units were found on site and all stated that appropriate staff had been oriented on the policy and received training to implement BFHFI. Additionally they stated that BFHFI activities were being implemented in these 22 facilities visited during the survey. In the other three health facilities, heads of maternity units were not available to provide information.

**Availability of standard training curriculums**: To conduct trainings in BFHFI, facilities are under obligation to use the standard MOH/MCDMCH IYCF training materials that include components of BFHFI. The results of the survey indicate that only 32 per cent of the facilities surveyed had a written and standard curriculum training package for providing support to both breastfeeding and non-breastfeeding mothers.

**Training of clinical staff on BFHFI:** In the 25 facilities, all 122 clinical staff eligible for this assessment was interviewed to determine whether they had been trained to implement the BFHFI. A facility was categorized as having clinical staff trained if 80% of such staff interviewed at the facility were compliant with all of the following criteria:

- Confirmed that they had received training on breastfeeding and Baby-Friendly practices at least 20 hours in total, including at least three hours of supervised clinical training, or, if on the job less than six months, received orientation on the policy.
- Were able to answer four out of five questions on breastfeeding support and promotion correctly.
- Described two issues that should be discussed with a pregnant woman if she indicated that she was considering giving her baby something other than breast milk. Explained correctly why it is important not to give mothers free formula samples from the infant formula companies, and gave correct reasons.

Overall, 53 per cent (65 of 122) of clinical staff had been trained in the 25 facilities. Figure 1 summarizes the results for each district. There were facilities that had 100% clinical staff trained, but these facilities did not meet other criteria of Step 2, such as orientation of staff and availability of a written standard curriculum. Facilities that had 100% clinic staff trained but did not attain the step were all small facilities with few staff: Luwi Mission which had all five clinical staff trained; Tulemane with four staff; Fiwale and Mishikishi with two each; and Chalabesa, ZNS Camp, and Chikumbi which had only one clinical staff person.

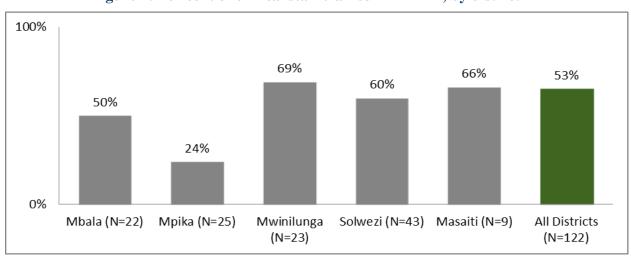


Figure 1: Per cent of clinical staff trained in BFHFI, by district

**Training of non-clinical staff on BFHFI**: The assessment team interviewed 136 non-clinical staff from the 25 facilities. Results show that overall 76 (57 per cent) of non-clinical staff had been trained in BHFHI, and that 10 of 25 facilities (40 per cent) met the criteria on training of non-clinical staff for Step 2.

The facilities that passed this part of Step 2 were the following health centres:

- Kawimbe which had four out of five (80%) staff trained
- Senga with 100% trained (seven staff)
- Libunga with 100% trained (two staff)
- Lumwana West with 100% trained (four staff),
- Kanuma with 100% trained (ten staff),
- Kyafukuma with 100% trained (three staff),
- Luamala with 100% trained (ten staff),
- Fiwale with 100% trained (nine staff),

- Kafulafuta with 100% trained (four staff), and
- Masaiti health centre with 100% trained (two staff).

Notably, none of the hospitals passed the Step 2 criteria for training of non-clinical staff. Figure 2 summarizes the results for each district.

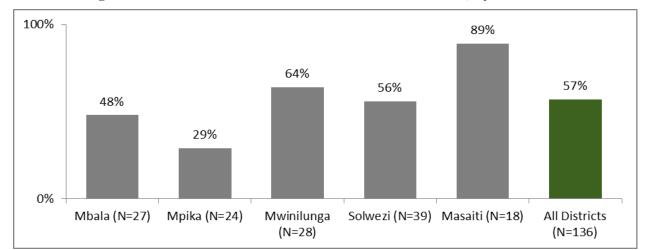


Figure 2: Per cent of non-clinical staff trained in BFHFI, by district

## **Step 2: Recommendations**

At health facility level, the heads of maternity services should:

a. Ensure that clinic staff implements BFHFI Step 2 as they implement other programs such as HIV or PMTCT.

The District Health Office should:

- b. Ensure that standard MOH/MCDMCH IYCF training materials are available for use in the reorientation/training of all staff.
- c. Reinforce use of the updated 2011 MOH guidelines on HIV and Infant Feeding.
- d. Ensure that facilities that conduct deliveries with no ANC services (such as Mbala General Hospital, for example) implement BFHFI in maternity wards and areas where infants and young children are found.
- e. Ensure that health centres operated by volunteers are covered by trained staff.
- f. Keep a record of trained staff and their activities, and take a regular inventory to update the record.

# STEP 3: INFORM ALL PREGNANT WOMEN ABOUT THE BENEFITS AND MANAGEMENT OF BREASTFEEDING

This step prepares expectant mothers on breastfeeding. Topics on breastfeeding education cover the importance of breastfeeding for both mother and baby, immediate prolonged (60 minutes) mother-baby skin-to-skin contact after birth, early initiation to breastfeeding, rooming in/bedding in 24 hours a day, feeding on demand/cue or baby-led feeding, breastfeeding frequently and the importance of correct positioning and attachment of baby to the mother's breast. Education is further given on risks of giving formula or other breast milk substitutes and the importance of continuing to breastfeed after six months when other foods are given to the baby.

Step 3 has the following components:

Interview with head of maternity services or antenatal services should indicate that:

1. The head of maternity or antenatal services reports that at least 80% of the pregnant women who are provided antenatal care in the facility receive information about breastfeeding.

Review of written materials should show that:

- 2. A written description of the standard minimum content of the breastfeeding information and any printed material provided to all pregnant women was available.
- 3. A copy or example of any printed material provided to all pregnant women is available.
- **4.** The antenatal information, either outlines or written materials, covers the following topics adequately:
  - The importance of breastfeeding for both baby and mother
  - The importance of immediate and prolonged skin-to-skin contact after birth
  - The importance of early initiation of breastfeeding
  - The importance of rooming-in/bedding-in 24 hours a day
  - The importance of feeding on demand/cue or baby-led feeding
  - The importance of feeding frequently to help assure enough milk
  - The importance of good positioning and attachment when breastfeeding
  - The importance of exclusive breastfeeding for the first 6 months, giving no other liquids or foods
  - The risks of giving formula or other breast-milk substitutes
  - The fact that breastfeeding continues to be important after 6 months when other foods are given.

Interviews with pregnant women should show that:

- 5. Women report that a staff member has talked with them individually or offered a group talk that included information about breastfeeding, as part of their antenatal care.
- **6.** Women recall basic information presented or discussed with them on at least two out of three topics.

For this step to be passed there had to be a "Yes" response in the interview with the head of maternity services; "yes" on availability of printed information on breastfeeding and that this printed information covered at least eight of the ten topics; and 70 per cent of pregnant women interviewed give correct responses on two out of the three topics they were asked about.

Findings showed that 8 of the 25 facilities (32%) passed Step 3.

The facilities that passed the step were in the following districts:

- Solwezi District: Three facilities (Luamala, Kanuma, Kyafukuma),
- Masaiti District: Four facilities (Fiwale Mission, Mishikishi, Kafulafuta and Masaiti clinic),
- Mbala District: One facility (Mbala General Hospital).

The assessment teams interviewed 188 pregnant women in the 25 facilities. The results indicate that 82 per cent had a group or individualized health talk on breastfeeding and slightly more than half (58.5 per cent) recalled what they learned from the health talk. The recall rate among those who received a talk was 71 per cent. Notably, all women interviewed in Masaiti District had 100 per cent recall of what had been taught, although the sample in that district was very small (only eleven women in total).

The 17 facilities that failed Step 3 did so either due to inadequate percentage on correct recall among pregnant women on what had been taught or due to lack of standard topics and/or IEC take-away materials for pregnant women on breastfeeding education.

Table 4 shows details by district of the per cent of pregnant women who received breastfeeding education and the per cent who recalled what they had been taught. Overall, 82 per cent of women had received breastfeeding education and 71 per cent of them had adequate recall of what they were taught.

Table 4: Per cent of pregnant women receiving breastfeeding education and recalling what was learned, by district

	Mbala (N=63)	Mpika (N=32)	Mwinilunga (N=27)	Solwezi (N=55)	Masaiti (N=11)	All Districts (N=188)
Per cent of pregnant women who received breastfeeding education	73	72	96	87	100	82
	Mbala (N=46)	Mpika (N=23)	Mwinilunga (N=26)	Solwezi (N=48)	Masaiti (N=11)	All Districts (N=154)
Per cent of pregnant women who recalled what they learnt (among those who received breastfeeding education)	57	43	88	83	100	71

## **Step 3: Recommendations**

At health facility level, the heads of maternity services should:

- a. Ensure that clinical staff is available at all times to provide adequate and correct information and care to pregnant women.
- b. Ensure that breastfeeding education includes practical demonstrations such as skin to skin contact and correct position and attachment of baby to mother's breast.
- c. Ensure breastfeeding education is conducted in key strategic areas where pregnant women and mothers and infants and young children are found, such as in ANC wards and maternity waiting homes.
- d. Provide leaflets to pregnant women on breastfeeding education, HIV and infant feeding after the health talk.
- e. Make outline of topics for breastfeeding education including maternal nutrition, HIV and family planning. Topics to be targeted according to gaps identified.
- f. Keep record of topics given.

#### District Health Offices should:

- a. Mentor and regularly monitor quality of education being given to pregnant women.
- b. Advocate for printing of IEC materials on maternal nutrition, breastfeeding education, and HIV and Infant Feeding, and make materials are available for distribution to pregnant women and mothers.

# STEP 4: HELP MOTHERS INITIATE BREASTFEEDING WITHIN A HALF-HOUR OF BIRTH

This step has the following components:

- **A.** Observations of births should be made to determine whether:
- 1. Babies were placed skin-to-skin with their mothers within five minutes of birth and held at least 60 minutes in skin-to-skin contact.
- 2. Mothers were shown how to recognize when their babies are ready to BF and offered help.
- **B.** Interviews with mothers should indicate that:
  - 3. Mothers who had vaginal deliveries were given their babies immediately or within five minutes after birth or, if not, the delay in contact was medically justified.
  - **4.** Mothers who gave birth by Caesarean section with a general anaesthesia were given their babies within a few minutes of when the mothers were responsive and alert or, if not, the delay in contact was medically justified.
  - 5. Mothers were able to have their babies with them, skin-to-skin, after delivery for at least 60 minutes without separation or the baby was separated from the mother or contact ended for a justified medical reason.
  - **6.** To determine if mothers were encouraged to look for signs that their babies were ready to breastfeed and offered help if needed.
- **C.** Interviews of mothers with babies in special care should indicate that:
  - 7. Mothers had a chance to hold their babies skin-to-skin or, if not, the staff gave justifiable reasons why they could not do so.

For a facility to pass Step 4, all of the following criteria had to be fulfilled:

- 75 per cent of all observations of deliveries had to comply with the first two criteria (criteria no. 1 and 2 above).
- 80 per cent of mothers with vaginal deliveries responded that they were given their babies within five minutes of birth (criteria no. 3).
- 50 per cent of mothers with Caesarean section deliveries responded "yes" on criteria no. 4.
- For skin to skin contact with mother (criteria no. 5), 80 per cent of mothers' responses were to be "Yes".
- 70 per cent of mothers had to respond that they were informed on signs when a baby was ready to feed (criteria no.6).
- 80 per cent of mothers with babies in special care responded "yes" on criteria no.7.

The assessment found that 6 of the 19 facilities that had mothers who had deliveries (32%) passed Step 4.

- The facilities that passed Step 4 are Chilonga Mission Hospital (Mpika District); Kanuma, Luamala, and Kyafukuma (Solwezi District); Luwi Mission (Mwinilunga District); and Kafulafuta (Masaiti District).
- Six facilities could not be assessed because they had no deliveries at the time of the assessment visit (one in Mpika District, two in Mwinilunga District and three in Masaiti District).

Table 5 shows the per cent of mothers helped in three key practices for early initiation to breastfeeding by district. The practices are as follows: Mothers being given their babies within 5 minutes of birth; which is soon after followed by immediate skin to skin contact of baby and mother for a period of 60 minutes covered together in the same beddings; and the mother taught to recognize breastfeeding cues from the baby to initiate breastfeeding as soon as the baby is ready.

Table 5: Per cent of mothers helped in key practices for early initiation of breastfeeding

	Mbala (N=35)	Mpika (N=44)	Mwinilunga (N=8)	Solwezi (N=33)	Masaiti (N=2)	All districts (N=122)
% of mothers given baby in 5 minutes	66	50	75	88	100	76
% of mothers taught to look for breast-feeding cues	49	48	75	45	50	49
	N=23	N=22	N=6	N=29	N=2	N=78
% of mothers practicing skin to skin for 60 minutes (among those who were given baby within 5 minutes)	26	50	100	38	50	43

Mpika District shows the lowest percentage (50 per cent) of mothers being given their babies within five minutes of delivery. Solwezi (88 per cent) and Mwinilunga (75 per cent) districts have done well in this practice. (Masaiti had only two deliveries so it is not possible to make definitive conclusions about results there.)

Results across all districts on teaching mother to look for breastfeeding cues were similar, with about half of mothers reporting they received such instructions. (The number of respondents in Mwinilunga, where the result was higher, was very small. There were only eight women.)

## **Step 4: Recommendations**

At health facility level, the heads of maternity services should implement mechanisms that will ensure that maternity staff:

- a. In delivery rooms give all mothers their babies within five minutes of birth.
- b. Help mothers practice skin-to-skin contact for 60 minutes.
- c. Teach and encourage mothers to look for signs for when their babies are ready to breastfeed and offer help, if needed.
- d. Display specific steps for early initiation in labour, delivery, and postpartum care rooms.

#### District Health Offices should:

- a. Re-orient all maternity and clinical staff working in labour, delivery and postpartum wards on the importance of early initiation to breastfeeding for both mother and baby.
- b. Mentor clinical staff to master and implement skills necessary to help mothers initiate breastfeeding within an hour of baby's birth and remain in contact with baby for 60 minutes.
- c. Introduce record keeping for early initiation to breastfeeding.
- d. Keep a record of early initiation practices.

# STEP 5: SHOW MOTHERS HOW TO BREASTFEED AND MAINTAIN LACTATION WHEN SEPARATED FROM INFANT

This step includes helping mothers on necessary breastfeeding skills such as to correctly position and attach babies to the breast, teaching signs of correct attachment and importance of feeding baby on colostrum, building confidence of the mother, explaining on pain that is accompanied by the first suckles of the baby on the breast and how to hand express breast milk and feed the baby using an open cup if the baby is unable to suckle.

Step 5 has the following components:

Interview with head/director of maternity should indicate that:

1. Mothers who have never breastfed, or have previously encountered problems with breastfeeding, receive adequate special attention and support both in the antenatal and postpartum periods.

Observations of staff should show that:

2. Staff demonstrate correctly and completely how to prepare and feed breast-milk substitutes and the mother giving a "return demonstration".

Interviews with clinical staff should indicate that they teach mothers:

- 3. About positioning and attachment of the baby to their breast and describe correct techniques.
- **4.** Hand expression and give adequate descriptions and demonstrations.
- 5. For mothers who are not breastfeeding, how to prepare their feeds.

Interviews with mothers should indicate that:

- **6.** Staff offered further help with breastfeeding within six hours of delivery.
- 7. Staff offered help with positioning and attaching their babies.
- 8. Breastfeeding mothers can demonstrate and/or describe correct positioning and attachment.
- 9. Mothers can describe signs that would indicate their babies are latched correctly.
- 10. Mothers were shown how to express their milk by hand or given written information.
- 11. Non-breastfeeding mothers were shown how to prepare formula feeds.

Interviews with mothers of babies in special care should indicate that mothers:

- 12. Had been offered help to start their breast milk coming and to keep up the supply within six hours of their babies' births.
- 13. Had been shown how to express their milk by hand or didn't want this help.
- 14. Can describe and demonstrate how they were shown to express their milk.

For a facility to pass this step, all of the following have to be true:

- The head of maternity services confirms there is special attention for mothers with breastfeeding problems during post-natal care period.
- 75 per cent of staff observed give correct demonstrations on how to prepare and feed breast-milk substitutes to babies.
- 50 to 80 per cent of clinical staff and mothers give correct responses (per cent target for each question depends on the number of items that are part of the question).

Three facilities (of 19) passed Step 5: Luamala in Solwezi District and two facilities in Masaiti District (Mishikishi Health Centre and Fiwale Mission Rural Hospital).

- Six health facilities did not have deliveries, so no mothers were available for interview and the facilities were excluded from Step 5. (Chilonga Mission Hospital (Mpika District); Chikumbi, Fiwale Mission, Kafulafuta, and Masaiti (Masaiti District) and Luamala (Mwinilunga District).
- Three of the remaining 19 health facilities did not have clinical staff available for interview (Kawimbe (Mbala District), Libunga (Mpika District) and Kanyama (Mwinilunga District).

Table 6 shows details on the results for various parts of this step across all health facilities combined.

Table 6: Per cent of mothers will well babies helped in key breastfeeding skills

	Mbala (N=35)	Mpika (N=43)	Mwinilunga (N=7)	Solwezi (N=32)	Masaiti (N=2)	Total (N=119)
Helped in breastfeeding in six hours of birth	66	35	100	53	100	54
Taught P&A of baby to breast	49	49	100	59	100	56
Correct return demonstration on P&A	46	51	71	63	100	55
Taught to hand express breast milk	20	2	14	38	100	19

Interviews with clinical staff on their skills in supporting breastfeeding: The assessment teams interviewed 109 clinical staff on breastfeeding management skills: correct positioning and attachment (P&A) of baby to mother's breast, hand expression of breast milk (HEBM) and preparation for infant feeding for non-breastfed babies. The findings indicate that 68 per cent of the clinical staff said they taught mothers how to correctly P&A, 60 per cent said they taught mothers how to hand express breast milk, and 61 per cent said they taught on replacement feeding.

**Interview with mothers who had well babies**: Table 6 shows the per cent of mothers who said they were helped to breastfeed by being taught key breastfeeding skills. In total, 119 mothers with well babies were interviewed on the following: How long it took to be helped by staff with breastfeeding skills; if they were taught to correctly P&A their babies to the breast; if they were requested to provide a return demonstration; and if they were taught on HEBM. The findings indicated that 54 per cent of mothers were helped to breastfeed within six hours of birth; 56 per cent were taught how to correctly P&A of baby to breast; 55 per cent gave correct return demonstration on P&A; and only 19 per cent were taught how to HEBM.

**Interviews with mothers of babies in special care units (SCU)**: Ten mothers with babies in SCU were interviewed. Of these ten women, 50 per cent were helped to breast feed within six hours of birth; 60 per cent were taught on correct P&A of the baby to the breast; 60 per cent gave correct return demonstration on P&A; and 60 per cent were taught how to HEBM.

# **Step 5: Recommendations**

At health facility level, the heads of maternity services should:

- a. Place specific protocols on key points for correct positioning of the baby to mother's breast and steps for hand expression of breast milk in post-partum wards and special care units.
- b. Ensure that staff on duty conducts breastfeeding observations within six hours of delivery on every mother to help and show her breastfeeding skills including:
  - Cues that the baby wants to breastfeed
  - Correct positioning and attachment of baby to mother's breast
  - Signs of good attachment or latching on and suckling
  - Hand expression of breast milk to maintain feeding baby only on breast milk and for mother to maintain lactation
- c. Pay extra attention to mothers with babies in SCU. These mothers need extra support on how they can feed their sick infants on only breast milk if babies are not able to breastfeed.
- d. Include breastfeeding demonstration skills by others with the support of family as part of discharge criteria from the facility
- e. Ensure that health facility staff provides more attention to mothers at risk for inadequate breastfeeding (first time mothers, mothers with flat or long nipples, etc.)
- f. Link families to community IYCF support groups for continuum of care to sustain exclusive breastfeeding.
- g. Ensure that staff include breastfeeding rounds in the post-partum care rounds and document mother-infant pairs with special needs.

### District Health Offices should:

- a. Implement mechanisms that will ensure that on-going orientation of untrained staff in key breastfeeding management skills is regularly conducted by trained staff.
- b. Provide on-going reorientation, training, mentoring and supervision.
- c. Provide IEC materials on key skills in breastfeeding management.
- d. Get the updated policy on HIV and infant feeding and disseminate to their respective health facilities.
- e. Monitor implementation of BFHFI activities by trained staff.

# STEP 6: GIVE NEW-BORN INFANTS NO FOOD OR DRINK OTHER THAN BREAST MILK, UNLESS MEDICALLY INDICATED

Step 6 had the following components which ensure that babies are exclusively breastfed from birth to discharge:

Review of hospital data sheet should indicate that:

1. At least 75% of the full-term babies delivered in the past year were exclusively breastfed, or mothers expressed breast milk from birth to or discharge, or, if they received any feeds other than breast milk this was because of documented medical reasons or mothers' informed choices.

Review of written materials should find that:

- 2. The health facility has any clinical protocols or standards related to breastfeeding and infant feeding that are in line with BFHFI standards and evidence-based guidelines.
- **3.** Materials which recommend feeding breast-milk substitutes, scheduled feeds or other inappropriate practices are not distributed to mothers.

Observations should find the following:

- **4.** The health facility has an adequate facility/space and necessary equipment for giving demonstrations for mothers who opt not to breastfeed on how to prepare formula and other feeding options, away from breastfeeding mothers.
- 5. Observations in the post-partum wards/rooms and any well baby observation areas find that babies were fed only breast milk, or there were acceptable medical reasons or informed choices for receiving something else.

Interviews with mothers of well babies should indicate that mothers:

- **6.** Report that their babies had received at least some breast milk or they were planning to breastfeed.
- 7. Report that their babies had received only breast milk or, if they had received anything else, it was for a justified medical reason.
- **8.** Mothers who have decided not to breastfeed report that the staff have discussed with them the various feeding options and were able to describe at least one thing that was discussed to help them decide what was suitable in their situations, or said they didn't want the information.

Interviews with mothers of babies in special care indicate that:

**9.** If mothers were not planning to breastfeed, staff has talked with them about risks and benefits of various feeding options.

For a facility to pass this step, the following elements have to be true:

- The items on hospital data, review of materials, and observations have to be "yes" and breast milk substitutes are not distributed.
- 70 to 80 per cent of mothers should give a correct answer to the questions (per cent of required correct responses depends on the number of items in each question).

Findings show that 11 of the 19 assessed facilities (58%) passed Step 6.

- As previously noted, in six of the facilities there were no mothers with deliveries that the assessment team could interview.
- The following facilities passed the step: Four facilities in Northwestern Province (Luwi Mission hospital in Mwinilunga District and Kanuma, Luamala and Kyafukuma health centres in Solwezi District); three facilities in Masaiti District (Fiwale Mission, Kafulafuta and Mishikishi); Nondo and Senga in Mbala District; and Libunga Health Centre in Mpika District.

**Hospital data sheet**: Record-keeping for births, breastfeeding /infant feeding, and HIV testing and counselling was overall weak. Where records were available, they were not easily accessible. All 25 health facilities were reviewed for records on birth statistics, exclusive breastfeeding from birth to discharge, and HIV testing and counselling (HTC) for pregnant women. The findings indicate that 52 per cent of the facilities had all the records for the data mentioned above, 28 per cent had records on births and HTC only, and 20 per cent did not have any of these categories of records available.

**Breastfeeding/infant feeding records:** The assessment team reviewed all 25 facilities and found that five facilities (20%) had no records of births (Kawimbe H/C (Mbala District), Mpika General Hospital (Mpika District), and three facilities in Mwinilunga District (Mwinilunga District Hospital, Lumwana and Kanyama health centres)). Of the remaining 20 facilities with records of births, 9,179 live births were recorded. Out of 9,179 recorded live births, records indicate that 24 infants (0.3%) received feeds other than breast milk. Nearly all of these (22 of the 24 such babies) were recorded in Chilonga Mission Hospital which had recorded a total of 886 births.

In facilities which had records of HTC for pregnant women, these records were not linked to maternity registers. Hence it was not known which babies were born from HIV-infected mothers. This lack of documentation made it difficult to ensure that HIV positive mothers were given necessary support to help them provide a safe start to the feeding for their HIV exposed infants based on informed choice.

# **Step 6: Recommendations**

At health facility level, the heads of maternity services should:

- a. Improve record keeping for statistics on:
  - Percentage of births including types and outcome of deliveries
  - Percentage of infants exclusively breastfed from birth to discharge
  - Percentage of infants replacement fed from birth to discharge
  - Percentage of pregnant women who received HIV testing and counselling, and the percentage of pregnant women who tested positive
  - Percentage of infants born from HIV-infected mothers
  - Babies discharged on replacement feeding
- b. Identify adequate facility/space and necessary equipment for giving demonstrations of how to prepare formula and other feeding options away from breastfeeding mothers as per criteria

### District Health Offices should:

- a. Monitor and strengthen Health Management Information Systems in maternity units and address statics on births, breastfeeding infants, non-breastfeeding infants and PMTCT, and other mentioned areas of weakness of data management in maternity units
- b. Ensure that PMTCT records are linked to maternity services
- c. Re-orient all clinical staff including doctors on the updated policy on HIV and infant feeding to provide standard information to mothers and the communities.

# STEP 7: PRACTICE ROOMING-IN, ALLOW MOTHERS AND INFANTS TO REMAIN TOGETHER 24 HOURS A DAY

Rooming-in is important for the following reasons:

- Mother has easy access to baby for breastfeeding
- Encourages breastfeeding on demand
- Reduces likelihood of infection for the new-born (e.g. acute respiratory infection, diarrhoea, meningitis)
- Helps establish and maintain breastfeeding
- Facilitates bonding process

For this step the assessment had the following two components:

Observations in the post-partum ward and rooms and any well baby areas should validate that:

1. Mothers and babies are seen in the same room.

Interviews with mothers in postpartum ward with well babies should find that:

2. Mothers report that the baby had been with the mother in the same room unless it was for a justified reason.

For this step to be passed by a facility, the following elements must be true:

- 80 per cent of observations made must validate that babies were with the mothers in the same room at the time an observation was being made, and
- 80 per cent of mothers interviewed confirmed being with their babies in the same room for 24 hours, unless for justifiable reason.

Findings showed that all assessed facilities (n=25) passed Step 7.

 Note: the assessment criteria were modified for the six facilities where there were no mothers to be interviewed. In these facilities, staff was asked whether it was a usual practice to keep the baby and mother in the same room.

All of the 121 mothers in the postpartum wards that were interviewed stated that they had their babies with them 24 hours a day. In the six facilities where no mothers were found, staff reported that it was a tradition for all babies and mothers to be together in the same room as the mother 24 hours a day.

# **Step 7: Recommendations**

District Health Offices should:

- a. Re-orient staff on the procedure of rooming-in, the importance and benefits of rooming-in for a mother and her baby.
- b. Ensure that staff educates mothers, fathers and grandmothers on the benefits of rooming-in and frequent skin to skin contact.

Ensure that community support groups in IYCF for the district communities are oriented on the importance and benefits of rooming-in.

# STEP 8: ENCOURAGE BREASTFEEDING ON DEMAND

Reasons for frequent and on-demand breastfeeding for a new-born are that:

- It facilitates earlier passage of meconium.
- It lowers maximal weight loss.
- Breast milk flow is established sooner.
- There is a large volume of milk intake on day three.
- There is less jaundice in the new-born.

This step has two components which were assessed through interviews with breastfeeding mothers with well babies in postpartum ward. Mothers were interviewed to determine if they were taught to recognize if their babies were hungry and were informed to breastfeed on demand. Mothers were:

- 1. Requested to describe at least two things they were told by the staff about how to recognize if their babies were hungry.
- 2. Asked if they had been advised by the staff to feed their babies for as often and as long as the babies wanted or something similar.

For a facility to pass this step:

- 80 per cent of mothers were to describe at least two things that they were told by staff about how to recognize if babies were hungry, and
- 80 per cent of mothers should respond that they were advised to feed their babies as often and as long as the babies wanted to breastfeed.

Findings showed that 12 (48%) of the 25 facilities passed the step.

- Note: The assessment criteria were modified for the six facilities where there were no mothers to be interviewed. In these facilities, staff was asked whether they taught mothers the practices that are part of this step.
- Facilities that passed Step 8 were four facilities in Mwinilunga District (Mwinilunga District Hospital and Kanyama, Lumwana, Luwi Mission health centres); Kanuma, Luamala and Kyafukuma (Solwezi District); and all five facilities in Masaiti District (Fiwale, Chikumbi, Mishikishi, Kafulafuta and Masaiti).

A total of 121mothers were interviewed to determine if they were taught how to recognize the signs of hunger and to breastfeed on demand. The findings indicate that 47 per cent were taught to recognize the signs of hunger and 45 per cent taught to breastfeed on demand (Table 7).

Table 7: Per cent of mothers taught to recognize signs for hunger and told to breastfeed on demand

	Mbala (N=35)	Mpika (N=44)	Mwinilunga (N=7)	Solwezi (N=33)	Masaiti (N=2)	Total (N=121)
Taught signs of hunger in baby	46%	39%	86%	48%	100%	47%
Told to breastfeed on demand	37%	34%	86%	55%	100%	45%

# **Step 8: Recommendations**

At health facility level, heads of maternity services should ensure that:

- a. Staff teach all mothers how to recognize if their babies are hungry and to breastfeed on demand.
- b. Staff to give information to all mothers and counsel them on the importance of demand breastfeeding and that breastfeeding demand should be from both baby and by the mother.
- c. Staff teach mothers how to give a quality breastfeed at each feed including the duration of each feed (till the baby leaves the breast on its own) for the baby to feed on both foremilk and hind breast milk in the process of demand feeding.

### District Health Offices should:

- a. Re-orient staff on management of demand breastfeeding including quality of a breastfeed and its benefits for baby and mother.
- b. Ensure that staff revises the Step 8 and link its importance in management of sustained exclusive breastfeeding.

# STEP 9: GIVE NO ARTIFICIAL TEATS OR PACIFIERS TO BREASTFEEDING INFANTS

Ensuring that mothers do not give teats or pacifiers (dummies or soothers) to babies addresses issues that interfere with breastfeeding: Use of pacifiers and teats can cause nipple confusion by the baby, leading to unsuccessful breastfeeding and it can also cause diarrhoea and upper respiratory infections.

Observations in the postpartum wards/rooms of well-baby new-borns should show that:

1. Babies are being fed without using bottles and teats or, if they are being fed with bottles, their mothers had been informed of the risks of using them.

Interview with breastfeeding mothers should indicate that:

- 2. Their babies were not fed any fluids in bottles with teats, as far as they knew.
- 3. Their babies had not sucked on pacifiers as far as they knew.

For a facility to pass this step, the following must be true:

- 80 per cent of babies observed being fed should validate that babies were being fed without using bottles and teats, and
- 80 per cent of mothers interviewed should respond that their babies were not being fed with bottles and had not sucked a pacifier.

Findings show that 88% (22 out of 25) facilities passed Step 9.

- Note: The assessment criteria were modified for the six facilities where there were no mothers to be interviewed. In these facilities, staff was asked about the baby feeding practices (instead of interviews with mothers).
- Only three facilities did not pass Step 8 (Chalabesa in Mpika District and Kaleni and Kanyama in Mwinilunga District).

# STEP 10: FOSTER THE ESTABLISHMENT OF BREASTFEEDING SUPPORT GROUPS AND REFER MOTHERS TO THEM ON DISCHARGE FROM THE HOSPITAL OR CLINIC

Step 10 looks at community linkages with health facilities for continuum of care and support to sustain exclusive breastfeeding upon mother's return home. The step has the following components:

Interview with head/director of maternity services to determine if:

- 1. The facility had established and coordinated mother support groups and community services that provide skilled support to breastfeeding or non-breastfeeding mothers.
- 2. Mothers are encouraged to be reviewed together with their babies soon after discharge by a skilled breastfeeding support person who can assess mother and baby and refer them for next level of care if necessary.
- **3.** Facilities had any printed materials on support groups and/or other community services where mothers can find help.

Interviews with mothers in post-partum ward should confirm that:

**4.** Mothers had been given information on how and where to get help with feeding their babies after returning home and can mention one type of help available.

For a facility to pass this step, the following responses are the minimum required:

- There should be "Yes" answer to two of the responses in 1, 2 and 3 above. This means that in the interview, the director scores two on any of the listed items (e.g. 1 and 2, or 1 and 3, or 2 and 3).
- If the score is less than two out of three in the interview, then 80 per cent of mothers interviewed should respond that they had been given information on how and where to get help with feeding their babies after returning home and can mention one type of help available.

Findings showed that 7 of 25 (28%) of facilities passed Step 10 and had established breastfeeding support groups.

 These were Nondo Health Centre (Mbala District); Lumwana Health Centre and Luwi Mission Hospital in Mwinilunga District; Kanuma, Luamala and Kyafukuma health centres in Solwezi District; and Mishikishi Health Centre in Masaiti District

The remaining 18 facilities (72%) did not have coordinated community support groups that link with the health facilities. However, mothers in these 18 facilities were advised to return for post-natal check-up to the facility, where there would be a skilled person to provide needed support on breastfeeding or infant feeding care.

# **Step 10: Recommendations**

At health facility level, heads of maternity services should:

- a. Ensure that all mothers are informed of where to find help if they have a breastfeeding problem.
- b. Provide written materials on breastfeeding support groups.
- c. Link mothers to community support groups.

### District Health Offices should ensure that:

- a. Staff is re-oriented on the importance of breastfeeding support groups for continuum of care.
- b. Effective breastfeeding support systems are established and strengthened.
- c. Two-way referral forms are introduced (from the health facility to breastfeeding support groups and back to the facility).
- d. Health facilities have a register/record of support groups and assign a lead staff to ensure that the system is operating well.
- e. IEC materials are translated into local languages.
- f. Specific activities for support groups are developed..

# Part B. Findings: Expanded Components of the BFHFI

The BFHFI was expanded to integrate fully the following components:

- a. Code compliance The International Code of Marketing of Breast Milk Substitutes
- b. MFC practices during labour and delivery
- c. HIV and Infant feeding- PMTCT through breastfeeding

# CODE COMPLIANCE: COMPLY WITH THE INTERNATIONAL CODE OF MARKETING OF BREAST MILK SUBSTITUTES

Code compliance is concerned with regulation of infant formula companies which distribute breast-milk substitutes (BMS), bottles, teats, etc. to pregnant women or mothers and the practice by hospitals of not receiving any free gifts from manufacturers or distributors.

The assessment for compliance with the code has the following components:

Review of written materials should show:

1. Records and receipts at the facility, when checked, show no indication that any BMS, including special formulas and other feeding supplies, were purchased by the health care facility for the wholesale price or more.

Observations should indicate that:

- 2. The health facility complies with the Code, with no materials that promote BMS, bottles, teats or pacifiers displayed or distributed to pregnant women, mothers and/or staff.
- 3. The health facility keeps infant formula cans and pre-prepared formula out of view unless in use.

Interviews with clinical staff should show that:

**4.** Staff can give two reasons why it is important not to give free formula samples from the infant formula companies to mothers.

For a facility to pass this step the following must be true:

- Responses are "yes" on the written materials and observations components, and
- 80 per cent of clinical staff interviewed should give at least two correct responses.

Findings showed that 20 (80 per cent) of the 25 facilities passed the step on compliance with the Code on marketing BMS.

- Among the 20 facilities that passed the step were three district hospitals (Mbala, Mwinilunga and Solwezi General Hospital).
- The five facilities that failed to comply were three facilities in Mpika District, one in Mwinilunga District and one in Masaiti District.

The assessment team interviewed 122 clinical staff on why it was important not to give free formula samples from the infant formula companies to mothers. (At facilities with no clinical staff available at the time of the interview, pharmacy staff was interviewed and records for purchase of formula were reviewed.) When asked why it is important not to give free formula samples from the infant formula companies to mothers, 96 (78 per cent) of interviewed staff gave correct responses by citing two reasons.

# **Code Compliance: Recommendations**

At health facility level, the heads of maternity services should:

- a. Ensure that receipts for purchase of formula are made available where there is a record of babies given breast milk substitutes.
- b. Ensure that all staff is knowledgeable with the Code, including reasons why it is important not to give free formula samples from the infant formula companies to mothers according to regulations in Zambia.
- c. There is daily monitoring of activities related to the code in maternity, neonatal units, MCH/Family Planning, nutrition units and related areas where pregnant women, infants and young children are found.

### District Health Offices should:

- a. Ensure that health facilities are not used for promoting use of BMS and other related products such as sales of formulas, distributions and displays of BMS.
- b. Ensure that manufactures and their distributors are banned from giving formula donations.
- c. Ensure that no advertisements are made on infant formula, feeding bottles, teats and cups with spouts.
- d. Work closely with district health inspectors to ensure that the law is enforced.
- e. Reinforce MOH PMTCT guidelines on HIV and infant feeding according to the laws of Zambia on use of BMS.
- f. There is on-going re orientation/debriefing/retraining of health staff on the Code.

### PROVIDE MOTHER-FRIENDLY CARE DURING LABOUR AND DELIVERY

The step must be practiced among other steps for the facility to attain BFHFI status. MFC practices promote an environment that facilitates support for breastfeeding. The assessment had the following components:

Review of written labour and childbirth policies should verify that these include statements on:

- 1. Allowing mothers to have a companion of their choice when in labour and during delivery, and allowing mothers to drink and eat light meals.
- 2. Teaching mothers how to cope with pain without use of drugs.
- **3.** Delivering in the position of choice.
- **4.** Providing care that will not necessitate invasive procedures unless complications arise.
- **5.** Care that does not involve invasive procedures, unless specifically required for a complication and the reason is explained to the mother.

Interviews with clinical staff should show that staff is able to:

- **6.** Describe at least two recommended practices and procedures that can help a mother be more comfortable and in control during labour and birth.
- 7. List at least three labour and birthing procedures that should not be used routinely but only if required due to complications.
- **8.** Describe at least two labour and birthing practices and procedures that make it more likely that breastfeeding will get off to a good start.

Interviews with pregnant women should validate the statement from the policy and if staff practiced MFC procedures. Mothers were asked:

- 9. If they were told by the staff that women could have companions of their choice with them throughout labour and birth and were given at least one reason it might be helpful.
- 10. To describe at least one appropriate thing they were told by the staff about ways to deal with pain and be more comfortable during labour and what is better for mothers, babies, and breastfeeding.

For a facility to pass this step:

- The policy had to have at least four out of the five points listed as criteria,
- 80 per cent of staff interviewed had to give correct responses at least on two of the three items, and
- 70 per cent of interviewed pregnant women should confirm/give correct responses to both questions.

Findings showed that 20 (80 per cent) of the 25 facilities passed the step on compliance with the Code on marketing BMS.

- Among the 20 facilities that passed the step were three district hospitals (Mbala, Mwinilunga and Solwezi General Hospital).
- The five facilities that failed to comply were three facilities in Mpika District, one in Mwinilunga District and one in Masaiti District.

**Review of materials:** The review of written materials found that 18 of the 25 facilities had policies on labour and child birth practices.

**Interviews with clinical staff**: Assessment teams interviewed 119 clinical staff on the three MFC practices listed above, which covered the following: Practices and procedures that can help mothers to be more comfortable and in control during labour and child birth; procedures that should not be used routinely unless complications arise; and practices and procedures that facilitate a good start to breastfeeding.

Findings indicate that 81 per cent of staff knew procedures that should not be used routinely during labour and delivery, 76 per cent knew how to make the mother more comfortable during labour and delivery and 68 per cent knew practices that facilitate a good start to breastfeeding. Annex 3.1 shows the number of clinical staff with knowledge on MFC practices by district.

**Interviews with pregnant women**: The assessment team interviewed 188 pregnant women on MFC information given to them during antenatal care services. Findings indicate that 76 per cent were informed that they can bring a companion of choice to be with them throughout labour and delivery, and 60 per cent were informed on how to cope with pain. Annex 3.2 shows the results of interviews with pregnant women on MFC practices by district.

The percentage of responses from interviews of both clinical staff and pregnant women shows that there is need for clinical staff to intensify MFC practices. Pregnant women were most appreciative of the MFC approach, in particular having a companion with them throughout labour and delivery. The majority of facilities in Solwezi and Masaiti districts inform pregnant women to bring a companion with them.

### **MFC:** Recommendations

At health facility level, the heads of maternity services should:

- a. Ensure that policies and protocols on MFC are displayed in ANC, and labour and delivery areas.
- b. Ensure that staff gives information to pregnant women and mothers on the policies and protocols on MFC.
- c. Ensure that staff teaches mothers on MFC practices during ANC services or upon arrival in labour.
- d. Orient community mother support groups in MFC practices.
- e. Ensure that staff involves family members.
- f. Provide MFC leaflets and information to pregnant women and family members..

### District Health Offices should:

- a. Provide health facilities with protocols on MFC services.
- b. Ensure that there is on-going orientation of staff on the importance of MFC as a critical component of care for women in labour throughout the birth process.
- c. Provide relevant IEC materials on MFC to health facilities. There is on-going re orientation/debriefing/retraining of health staff on the Code.

## HIV AND INFANT FEEDING PRACTICES

HIV and infant feeding practices are the last topic on the list of the Expanded Ten Steps to Successful Breastfeeding. The HIV and infant feeding section covered policies and procedures in HTC in pregnancy for PMTCT, optimal feeding practices for HIV exposed infants, training materials and capacity-building of clinical and non-clinical staff, health information and support to pregnant mothers (regardless of HIV status) and extra support for HIV positive women and mothers.

This step has the following components:

Interview with head/director of maternity services on facility policies and procedures concerning:

- 1. Providing or referring pregnant women for testing and counselling for HIV.
- 2. Counselling women concerning PMTCT of HIV.
- **3.** Provide individual, private counselling for pregnant women and mothers who are HIV positive on infant feeding options.
- 4. Ensuring confidentiality for women who are HIV positive.
- 5. Mothers who are HIV positive or concerned that they are at risk are referred to at least one community support service for HIV testing and infant feeding counselling, if one exists.

Review of written materials should show that:

- **6.** A written curriculum on training on HIV and infant feeding is available.
- 7. The training covers the following topics:
  - Basic facts on the risks of HIV transmission during pregnancy, labour and breastfeeding and its prevention
  - Importance of testing and counselling for HIV
  - Local availability of feeding options (infant formula, heat treating breast milk, wet nurses, milk banks, etc.)
  - Facilities/provision for counselling HIV positive women on the advantages and disadvantages of different feeding options (may involve referrals to infant feeding counsellors)
  - How to assist HIV positive mothers who have decided to formula feed to prepare and give feeds (may involve referrals to infant feeding counsellors)
  - How to assist HIV positive mothers who have decided to breastfeed, including how to transition to replacement feeds at the appropriate time
  - The dangers of mixed feeding
  - How to minimize the likelihood that a mother whose status is unknown or HIV negative will be influenced to replacement feed

Review of information provided to pregnant women and mothers on HIV and infant feeding should verify that the information covers adequately the following topics:

- **8.** The routes by which HIV-infected women can pass the infection to their infants and proportion of infection for each route.
- 9. The importance of testing and counselling for HIV and where to get it.
- **10.** The importance of HIV positive women making informed infant feeding choices and where they can get the needed counselling.
- 11. IEC take away leaflets.

Interviews with clinical staff should confirm that they had been trained to provide services in HIV and Infant Feeding. Staff should be able to:

- 12. Describe at least one measure that can be taken to maintain confidentiality and privacy of pregnant women and mothers who are HIV positive.
- **13.** To mention at least two policies or procedures that help prevent transmission of HIV from an HIV positive mother to her infant during feeding within the first six months.
- **14.** Describe at least two issues that should be discussed when counselling an HIV positive mother who is deciding how to feed her baby.

Interviews with pregnant women should indicate that:

- 15. Staff had talked with them or given a talk about HIV and pregnancy.
- 16. Informed them that a woman who is HIV positive can pass the HIV infection to her baby.
- 17. Women can describe at least one thing the staff told them about why testing and counselling for HIV is important for pregnant women.
- 18. Women can describe at least one thing the staff told them about what women who do not know their HIV status should consider when deciding how to feed their babies, or an HIV positive mother needs to consider when deciding how to feed her baby.

For a facility to pass this step:

- The response had to be "yes" to the question on policies and procedures, review of written material and on information provided to pregnant women.
- 80 per cent of clinical staff and 80 per cent of pregnant women had to give correct responses to the questions asked.

Findings showed that 5 out of 25 facilities (20%) passed the step on HIV and infant feeding.

- The facilities that passed this step were Nondo and Senga health centres in Mbala District, and Kanuma, Luamala and Kyafukuma in Solwezi District.
- For facilities without heads of maternity services available, MCH staff responded to questions.

**Interviews with clinical staff on HIV and infant feeding-related issues:** Assessment teams interviewed 122 clinical staff on HIV testing and counselling and issues related to infant feeding. Ninety-four per cent were knowledgeable on general HTC issues, 87 per cent were knowledgeable on policies, and 85 per cent on counselling for infant feeding decision-making. Annex 4 shows the results of interviews with clinical staff on this subject by district.

**Interviews with pregnant women on HIV related issues during pregnancy:** Assessment teams interviewed 188 women. Findings indicate that 95 per cent had a health education talk on HIV in pregnancy and 86 per cent were knowledgeable on MTCT and the importance of HIV testing during pregnancy. The knowledge displayed by pregnant women tallied with what the clinical staff had demonstrated. This demonstrates that a lot of efforts have been made in the area of HIV and PMTCT in pregnancy, labour and delivery.

However, pregnant women were less knowledgeable on HIV testing for infant feeding decision-making among pregnant women of unknown HIV status. Sixty-two per cent knew the importance of HIV testing for infant feeding decision making. Clinical staff needs to pay attention to counsel

pregnant women of unknown HIV status for infant feeding decision-making. Annex 4.2 shows the results of interviews with pregnant women by district.

# **HIV and Infant Feeding: Recommendations**

At health facility level, the heads of MCH departments should:

- a. Update staff and communities on current recommendations on PMTCT HIV and infant feeding.
- b. Ensure that all pregnant women are informed on HIV in pregnancy and the importance of knowing one's HIV status.
- c. Ensure that pregnant women who do not know their HIV status are encouraged to get tested and counselled on PMTCT and infant feeding.
- d. Ensure that policies and protocols in ANC and all relevant areas where pregnant women, mothers and men are found on display.
- e. Provide leaflets on HIV, PMTCT and infant feeding in the context of HIV.

### District Health Offices should:

- a. Ensure that recommended policies on HIV and infant feeding are displayed in all maternity, MCH/family planning and paediatric departments.
- b. Mentor staff and community support groups on HIV and infant feeding.
- c. Provide IEC material for pregnant women and mothers on HIV and infant feeding.
- d. Put in place mechanisms for monthly mother-infant pair follow up regardless of HIV status for continuum of care until new-born infants are two years of age.
- e. Strengthen community support for HIV and infant feeding.

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# 4. Discussion

Findings from the evaluation indicate that the 25 facilities were at different levels in implementing the BFHFI prescribed package. None of the facilities had implemented all the Ten Steps with the expanded components. However six facilities (24%) were close to meeting the criteria to attain the BFHFI status. These facilities only failed in one to three of the steps in which they did not meet either one or a few sub-parts of a step or steps. The six facilities that were close to meeting the criteria were Luwi Mission Hospital in Mwinilunga district; Kanuma, Luamala and Kyafukuma health centres in Solwezi district; and Fiwale Mission Hospital and Mishikishi health centre in Masaiti District (Table 8). Of the six, Luamala Health Centre (Solwezi District) only failed one step of few sub-parts of Step 1 (the policy). The other five facilities failed on two or three of a few sub-sets of the Ten Steps and/or on Mother Friendly Care or HIV and Infant Feeding. It should be noted these six health facilities that were close to attaining BFHFI were closely supervised and mentored with financial and technical support from ZISSP.

Table 8: Facilities that almost met criteria for BFHFI: Pass/fail status for each BFHFI Step

	Baby Friendly Health Facility Steps													
District	Facility name	I	2	3	4	5	6	7	8	9	10	Code	MFC	HIV & IF
Mwinilunga	Luwi Mission Hospital	Y	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	N
Solwezi	Kanuma H/C	Υ	Y	Υ	Y	N	Y	Υ	Y	Y	Υ	Y	N	Υ
	Luamala H/C	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Υ	Y	Y	Y
	Kyafukuma	Υ	Υ	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Y	Ν	Y
Masaiti	Fiwale	Υ	N	Υ	Υ	Υ	Υ	Υ	Y	Υ	N	Y	Ν	N
	Mishikishi	Y	Ν	Υ	Υ	Ν	Υ	Υ	Υ	Υ	Υ	Y	N	Υ

In ranking performance on individualized steps, Figure 3 shows the overall performance among all hospitals assessed for each of the BFHFI steps. Results show that Step 7 was achieved by 100% of the 19 facilities assessed. This was followed by Step 9 (giving no teats or pacifiers) in which 22 of 25 facilities (88%) achieved, and by the step on the Code of Marketing of BMS which was achieved by 20 out of 25 facilities (80%). These steps were relatively easy to achieve as they did not involve technical knowledge and skills.

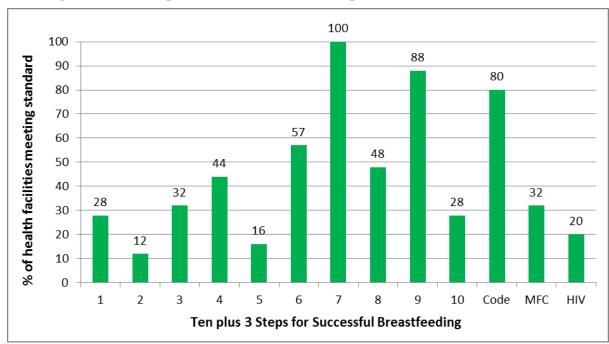


Figure 3: Overall performance of BFHFI Steps, 25 health facilities in Zambia

Table 9 shows a table on ranking of performance on individualized steps by facilities.

**Table 9: Ranking of the Step performance** 

Step no.	Step description	No. of facilities that passed the step	Per cent (%) of facilities that passed
7	Practice rooming-in — allow mothers and infants to remain together — 24 hours a day.	19 out of 19	100
9	Give no artificial teats or pacifiers to breastfeeding infants.	22 out of 25	88
The Code	Code compliance.	20 out of 25	80
6	Give new-born infants no food or drink other than breast milk, unless medically indicated.	II out of 19	57
8	Encourage breastfeeding on demand.	12 out of 25	48
4	Help mother initiate breastfeeding within a half-hour of birth.	6 out of 19	32
3	Inform all pregnant women about the benefits and management of breastfeeding.	8 out of 25	32
MFC	Mother-friendly care.	6 out of 19	32
I	Have a written breastfeeding policy that is routinely communicated to all health care staff.	7 out of 25	28
10	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	7 out of 25	28

Step no.	Step description	No. of facilities that passed the step	Per cent (%) of facilities that passed
HIV & IF	HIV and infant feeding.	5 out of 25	20
5	Show mothers how to breastfeed, and to maintain lactation when separated from infant.	3 out of 19	16
2	Train all health care staff in skills necessary to implement this policy.	3 out of 25	12

Based on performance, Steps that need greater attention are those on the policy, training of health staff, practices for early initiation to breastfeeding, showing mothers how to breastfeed and ensuring they are aware of the benefits of breastfeeding, breastfeeding on demand, and establishing community support groups (Steps 1, 2, 3, 4, 5, 6, 8 and 10 and MFC and HIV/IF). Steps 1 and 2 and the step on HIV and Infant Feeding require commitment from the DHO management to take ownership and facilitate implementation of the policy. Step 3 (informing pregnant women about benefits and management of breastfeeding) will require staff in charge of ANC services to monitor quality of breastfeeding education provided to pregnant women, documenting sessions provided and conducting exit interviews with pregnant women. Steps 4 and 5 (early initiation to breastfeeding, showing mothers how to breastfeed, and maintaining lactation when separated from infant) require staff working in these areas to sharpen their hands-on skills in breastfeeding management. Similarly, improved hand-on skills are required to address Step 6 and 8 (giving new-born infants no food or drink other than breast milk, and encouraging breastfeeding on demand). Step 10 requires heads of MCH and maternity services to take responsibility and facilitate the process of establishing linkages between health and community services on breastfeeding support.

An interesting finding is that while over 80 per cent of pregnant women received health talks, retention of messages is around 71 per cent among those who received talks. There is need to explore other ways of giving health talks and continually reinforcing that information so that mothers retain more information.

Results indicate that 95 per cent of staff and 85 per cent of pregnant women are knowledgeable on the importance of HIV testing in pregnancy. However, pregnant women with unknown HIV status were less knowledgeable on the importance of HIV testing for infant feeding decision-making. Fewer women (62 per cent) knew the importance of HIV testing for infant feeding decision-making than for the importance of HIV testing in pregnancy (85 per cent). It is important that pregnant women are informed of risks involved in MTCT when HIV status is not known. Pregnant women should understand the relevance for decision-making on infant feeding so that they can prevent mother to child transmission through breastfeeding while ensuring optimal nutrition for HIV-exposed infants and young children.

The evaluation also revealed that the Management Information System in all health facilities was weak with regard to statistics on births, exclusive breastfeeding, replacement feeding and HTC for pregnant women. Where records for HTC were available, they were not linked to maternity services for PMTCT. In addition, PMTCT providers have continued to give outdated information, such as breastfeeding cessation at six months.

Findings also showed that district hospitals and urban health centres scored very low results compared to rural health centres. Mpika General Hospital scored the least of all the district hospitals (Annex 5.2). This was also reflected at health centre level; Mpika District was the lowest performing district in this BFHFI assessment.

There will be need for support from ZISSP to reassess the six facilities that are close to attaining Baby-Friendly status before the end of December 2012. These six facilities will be assessed only in the steps where their performance was weak. The remaining 19 facilities with overall weak performance will need intensive mentorship from ZISSP before they can be reassessed. It is critical

that ZISSP continues to provide support to district hospitals to enable them take a leading role to model BFHFI for standardization of care in both primary and tertiary health care facilities, under policy guidance from the national level.

Although the BFHFI assessment coverage was not representative of all ZISSP district targets, nor was the sample nationally representative, a great insight has been gained in the implementation of the BFHFI. Reflecting back on the purpose and objectives, 25 facilities were successfully assessed and gaps have been identified for attention.

# 5. Conclusion

While the assessment results show that it is challenging to fully implement BFHFI, facilities are able to attain BFHF status with support from management. ZISSP provided consistent support to these facilities in the twelve months preceding the assessment to strengthen their ability to implement all of the BFHFI steps and attain BFHI status. Although none of the facilities in this assessment met all of the criteria for BFHF status, six came close to meeting the criteria. Results showed that some of the BFHFI steps were relatively easy to implement, while others need extra support at policy and facility level to build technical capacity in knowledge and skills. Additionally, district hospitals and urban health centres scored very low results compared to rural health centres. Ultimately, working to support facilities to attain BFHFI status is one important step in improving new-born health and survival. The results of this assessment provide several specific recommendations at the national and facility levels for how facilities can best be supported in this approach.

# 6. Overall Recommendations

# **Ministry of Health:**

- a. Reassess the six facilities that were close to attaining BFHFI status before certifying them as models for year 2012.
- b. Re-enforce the implementation of the BFHFI strategy nationally in health institutions at all levels and through community services.
- c. Use lessons learned from the assessment results and put in place mechanisms to scale up the implementation of the BFHFI strategy in all health facilities and community services throughout the country.
- d. Institutionalize the BFHFI strategy into health systems for sustainability of activities, regular assessments/re-assessment for accreditation and/or maintenance of BFHFI status in health institutions.
- e. Disseminate updated national policy on HIV and infant feeding; with MCDMCH ensure that the policy is reinforced in all district health facilities and community services for harmonization of messages provided to mothers and communities.
- f. In collaboration with National Food and Nutrition Commission (NFNC), make BFHFI and related IYCF training materials available in all districts for training, supportive supervision, mentoring and monitoring of BFHFI activities

# **Facility level:**

- a. Partners supporting MOH/MCDMCH in IYCF programmes should provide technical support toward BFHFI activities to improve coverage and expand BFHI implementation.
- b. Health facilities should display policies and guidelines for implementation of BFHFI strategy. Relevant areas for display include maternity services, paediatric wards, medical and surgical departments, under five clinics, outpatient departments and any other places at health facilities where mothers and infants are present.
- c. Relevant managers of health facilities should monitor documentation of infant feeding practices (as reflected on data sheets of maternity practices) to ensure that records pertaining to BFHFI Steps 4, 6 and 9 are documented.
- d. All clinical and non-clinical staff (as well as community workers) who are in contact with pregnant women and mothers of infants and young children should be trained in BFHFI to support IYCF practices both at facility and community levels.
- e. Community IYCF and Baby Friendly Health Community Initiative (BFHCI) should be rolledout in collaboration with other community-based programs such as safe motherhood groups. This approach will complement efforts made at the facility level for continuum of care for the mother-infant pair upon return home.
- f. Advocate for availability of IEC materials on IYCF for distribution to pregnant women and mothers.

# Annex 1: BFHFI Training Status of Clinical and Non-clinical Staff by District and facility

North	ern Province: Mbala District				
No	Name of health facility	Clinical sta	aff trained	Non clinical	staff trained
		Yes	No	Yes	No
1	Kawimbe Health Centre	N/S	N/S	4	I
2	Mbala General Hospital	3	9	0	8
3	Nondo Health Centre	I	1	2	I
4	Senga Health Centre	3	I	7	0
5	Tulemane Health Centre	4	0	0	4
	Total	11	11	13	14
Muchi	nga Province: Mpika District				
6	Chalabesa Health Centre	I	0	2	I
7	Chilonga Mission Hospital	I	14	I	6
8	Libunga Health Centre	N/S	N/S	2	0
9	Mpika District Hospital	3	5	2	8
10	ZNS Camp Health Centre	I	0	0	2
	Total	6	21	7	17
North	-Western Province: Mwinilunga Distric	t			
П	Kanyama RHC	N/S	N/S	N/S	N/S
12	Lumwana West Health Centre	I	0	4	0
13	Luwi Mission Hospital	5	0	4	4
14	Kaleni Mission Hospital	5	2	6	3
15	Mwinilunga District Hospital	5	5	4	3
	Total	16	7	18	10

North-Western Province: Solwezi District

No	Name of health facility	Clinical sta	aff trained	Non clinical staff trained		
		Yes	No	Yes	No	
16	Kanuma RHC	4	0	10	0	
17	Kyafukuma RHC	3	0	I	0	
18	Luamala HC	3	0	10	0	
19	Solwezi General Hospital	8	11	0	8	
20	Solwezi Urban HC	8	6	I	9	
	Total	26	17	22	17	
Сорре	erbelt Province: Masaiti District	•				
21	Chikumbi RHC	1	0	0	I	
22	Fiwale Mission Hospital	2	0	9	0	
23	Kafulafuta Mission HC	0	2	4	0	
24	Masaiti Council Clinic	1	I	2	0	
25	Mishikishi HC	2	0	I	I	
	Total	6	3	16	2	

# Annex 2: Health Facility Data on Statistics for Births, Exclusive Breastfeeding, Replacement Feeding and HIV Testing for Pregnant Women by District

### **Mbala District**

Hospital data	Mbala GH	Kawimbe RHC	Tulemane RHC	Nondo RHC	Senga RHC
Births (2011)	1077	Records not available	318	132	148
Infants fed only breast milk birth to discharge	Records not available	Records not available	Records not available	132	148
Infants fed on breast milk substitutes	Records not available	Record not available	Records not available	Records not available	Records not available
HTC for pregnant women	Records not available	Records not available	Records not available	132	Records not available
HIV positive women	Records not available	Records not available	Records not available	7	344

### **Mpika District**

Hospital data	Mpika DHSP	Chilonga Mission Hospital	ZNS RHC	Chalabesa RHC	Libunga RHC
Births 2011	Records not available	886	9	397	98
Infants fed only breast milk birth to discharge	Records not available	864	Records not available	Records not available	40 (Aug – Dec 2011)
Infants fed on breast milk substitutes	Records not available	22	Records not available	Records not available	Records not available
HTC for Pregnant women	Records not available	864	138	394	84
HIV positive women	Records not available	60	8	3	Records not available

# **Mwinilunga District**

Hospital data	Mwinilunga DHS	Luwi Mission Hospital	Kaleni Mission Hospital	Lumwana West HC	Kanyama RHC
Births 2011	Record not available	348	906	Record not available	Record not available
Infants fed only breast milk birth to discharge	Records not available	304	Records not available	Records not available	Record not available
Infants fed on breast milk substitutes	Records not available	Records not available	Records not available	Records not available	Records not available
HTC for pregnant women	Records not available	Records not available	Records not available	Records not available	Records not available
HIV positive women	Records not available	Records not available	Records not available	Records not available	Records not available

# Solwezi district

Hospital data	Solwezi GH	Solwezi urban HC	Luamala RHC	Kyafukuma	Kanuma
Births 2011	2,577	1,256	108	19	79
Infants fed only breast milk birth to discharge	2,461	1,248	108	19	79
Infants fed on breast milk substitutes	185	2	0	0	0
HTC pregnant women	2,577	1,256	108	176	79
HIV positive women	185	144	14	15	Record not available

NB Solwezi UHC:

1 baby received a feed for medical reasons

1 baby received a feed for non-medical reason

# **Masaiti District**

Hospital data	Mishikishi RHC	Masaiti Clinic	Kafulafuta Mission	Fiwale Mission	Chikumbi RHC
Births 2011	220	57	123	363	58
Infants fed only breast milk birth to discharge	220	57	123	363	58
Infants fed on breast milk substitutes	0	0	0	0	0
HTC pregnant women	440	128	Records not available	684	Records not available
HIV positive	48	21	Record not available	Record not available	Record not available

# **Annex: 3: Mother Friendly Care (MFC) Practices**

# Number of clinical staff with knowledge on MFC practices

MFC Practices	Mbala (NP)	Mpika MCHP	Mwinilunga (NWP)	Solwezi (NWP)	Masaiti (CBP)	Total	Percentage (%)
To make labour comfortable	19	16	22	32	2	91	76.%
Not knowing	3	9	I	11	4	28	24%
Total	22	25	23	43	6	119	100%
Not to be used routinely in labour and delivery	19	17	23	31	6	96	81%
Not knowing	3	8	0	12	0	23	19.%
Total	22	25	23	43	6	119	100%
That facilitate good start to breastfeed	18	13	19	28	3	81	68%
Not knowing	4	12	4	15	3	38	32%
Total	22	25	23	43	6	119	100%

# Number of pregnant women informed on MFC practices during pregnancy.

MFC information given to pregnant women	Mbala (NP)	Mpika MCHP	Mwinilunga (NWP)	Solwezi (NWP)	Masaiti (CBP)	Total	Percentage (%)
Told on companion in labour and delivery	50	25	24	32	11	142	76%
Not told	13	7	3	23	0	46	24%
Total	63	32	27	55	П	188	100%
Taught how to deal with pain	34	15	22	31	П	113	60%
Not taught	29	17	5	24	0	75	40%
Total	63	32	27	55	11	188	100%

# **Annex 4: HIV and Infant Feeding**

# Number of clinical staff with knowledge on HIV and infant feeding

HIV issues	Mbala (NP)	Mpika MCHP	Mwinilunga (NWP)	Solwezi (NWP)	Masaiti (C/BP)	Total	Percentage (%)
Knew confidentiality	21	24	22	40	8	115	94%
Did not know	I	Ĺ	I	3	I	7	6%
Total	22	25	23	43	9	122	100%
Knew policies	22	21	21	34	8	106	87%
Did not know	0	4	2	9	I	16	13%
Total	22	25	23	43	9	122	100%
Knew decision making for infant feeding	21	19	21	36	7	104	85%
Did not know	I	6	2	7	2	18	15%
Total	22	25	23	43	9	122	100%

# Number of pregnant women receiving health talk on HIV

HIV issues	Mbala (NP)	Mpika MCHP	Mwinilunga (NWP)	Solwezi (NWP)	Masaiti (CBP)	Total	Percentage (%)
Had health talk on HIV in pregnancy	59	28	27	53	11	178	95%
Did not	4	4	0	2	0	10	5%
Total	63	32	27	55	11	188	100%
Knew on MTCT	50	22	24	52	11	159	85%
Did not know	13	10	3	3	0	29	15%
Total	63	32	27	55	11	188	100%
Knew importance of HTC in pregnancy	51	21	24	54	11	161	86%
Did not know	12	11	3	I	0	27	14%
Total	63	32	27	55	11	188	100%
Knew recommendations on infant feeding for unknown HIV status	39	12	17	38	10	116	62%
Did not know	24	20	10	17	I	72	38%
Total	63	32	27	55	11	188	100%

# **Annex 5: BFHFI Assessment Summary Results**

#	Step	Mbala General Hospital	Kawimbe Health Centre	Nondo Health Centre	Senga Health Centre	Tulemane Health Centre	Chilonga Mission Hospital
Ι	Have a written breastfeeding policy that is routinely communicated to all health care staff.	Х	Х	Х	Х	X	Х
2	Train all health care staff in skills necessary to implement this policy.	Х	Х	Х	Х	×	Х
3	Inform all pregnant women about the benefits and management of breastfeeding.	√	Х		Х	Х	Х
4	Help mother initiate breastfeeding within a half-hour of birth.	Х	Х	Х	Х	Х	<b>√</b>
5	Show mothers how to breastfeed, and to maintain lactation when separated from infant.	X	Х	Х	Х	Х	Х
6	Give new-born infants no food or drink other than breast milk, unless medically indicated.	X	Х	<b>√</b>	√	Х	Х
7	Practice rooming-in — allow mothers and infants to remain together — 24 hours a day.	√	√	<b>V</b>	√	$\sqrt{}$	<b>√</b>
8	Encourage breastfeeding on demand.	Х	Х	Х	Х	Х	<b>√</b>
9	Give no artificial teats or pacifiers to breastfeeding infants.	√	√	<b>√</b>	√	$\sqrt{}$	<b>√</b>
10	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	×	Х	$\sqrt{}$	Х	Х	Х
Α	Code compliance.	√	√	<b>V</b>	√	$\sqrt{}$	<b>√</b>
В	Mother-friendly care.	√	Х	<b>V</b>	Х	Х	Х
С	HIV and infant feeding.	×	Х	<b>V</b>	√	Х	X
	Hospital has fully implemented the Ten Steps and the expanded components required for designation as "Baby-friendly":	Х	Х	Х	Х	Х	Х

#	Step	Zambia National Service Camp8	Libunga Health Centre	Chalabesa Health Centre	Kanyama RHC9	Lumwana West RHC
I	Have a written breastfeeding policy that is routinely communicated to all health care staff.	X	Х	Х	X	Х
2	Train all health care staff in skills necessary to implement this policy.	X	Х	Х	X	Х
3	Inform all pregnant women about the benefits and management of breastfeeding.	X	Х	Х	×	Х
4	Help mother initiate breastfeeding within a half-hour of birth.	X	Х	Х	√	√
5	Show mothers how to breastfeed, and to maintain lactation when separated from infant.	X	Х	Х	×	Х
6	Give new-born infants no food or drink other than breast milk, unless medically indicated.	X	√	Х	×	X
7	Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.	√	<b>√</b>	√	√	<b>√</b>
8	Encourage breastfeeding on demand.	X	Х	Х	√	<b>√</b>
9	Give no artificial teats/pacifiers to breastfeeding infants.	√	√	Х	×	<b>√</b>
10	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	Х	Х	Х	Х	<b>V</b>
Α	Code compliance.	√	Х	Х	√	√
В	Mother-friendly care.	X	Х	Х	√	Х
С	HIV and infant feeding.	X	Х	Х	×	Х
	Hospital has fully implemented the Ten Steps and the expanded components required for designation as "Baby-friendly":	×	Х	Х	×	Х

<sup>8</sup> Health centre only serves for emergency deliveries.
9 Run by two community workers not on the payroll. Need to be trained.

#	Step	Luwi Mission Hospital10	Kaleni Mission Hospital <sup>11</sup>	Solwezi General Hospital	Solwezi Urban Clinic Hospital	Kanuma Health Centre <sup>10</sup>
I	Have a written breastfeeding policy that is routinely communicated to all health care staff.	√	Х	V	√	√
2	Train all health care staff in skills necessary to implement this policy.	Х	Х	Х	Х	√
3	Inform all pregnant women about the benefits and management of breastfeeding.	√	Х	X	Х	√
4	Help mother initiate breastfeeding within a half-hour of birth.	√	Х			√
5	Show mothers how to breastfeed, and to maintain lactation when separated from infant.	Х	Х	Х	Х	×
6	Give new-born infants no food or drink other than breast milk, unless medically indicated.	√	Х	Х	Х	√
7	Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.	V	V	V	<b>√</b>	√
8	Encourage breastfeeding on demand.	V	Х	Х	Х	√
9	Give no artificial teats/ pacifiers to breastfeeding infants.	V	Х	<b>V</b>	<b>√</b>	√
10	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	V	Х	Х	Х	$\sqrt{}$
Α	Code compliance.	√	Х	V	√	√
В	Mother-friendly care.	√	Х	X	Х	X
С	HIV and infant feeding.	X	Х	Х	X	<b>V</b>
	Hospital has fully implemented the Ten Steps and the expanded components required for designation as "Baby-friendly":	Х	Х	Х	х	×

<sup>&</sup>lt;sup>10</sup> Committed to become BF.

<sup>&</sup>lt;sup>11</sup> Needs extra support

# Pass/Fail Summary (continued)

#	Step	Kyafukuma Health Centre	Fiwale Mission Hospital <sup>12</sup>	Chikumbi RHC	Mishikishi Health Centre	Kafulafuta Mission RHC	Masaiti Council Clinic
I	Have a written breastfeeding policy that is routinely communicated to all health care staff.	V	V	X	√	Х	X
2	Train all health care staff in skills necessary to implement this policy.	V	X	X	X	Х	X
3	Inform all pregnant women about the benefits and management of breastfeeding.	√	V	Х	√	√	√
4	Help mother initiate breastfeeding within a half-hour of birth.	√	$\sqrt{}$	√	Х	<b>√</b>	Х
5	Show mothers how to breastfeed, and to maintain lactation when separated from infant.	Х	$\sqrt{}$	Х	√	Х	Х
6	Give new-born infants no food or drink other than breast milk, unless medically indicated.	√	$\sqrt{}$	Х	√	<b>V</b>	Х
7	Practice rooming-in – allow mothers and infants to remain together – 24 hours a day.	√	V	√	√	<b>√</b>	<b>√</b>
8	Encourage breastfeeding on demand.	√	V	√	<b>V</b>	V	√
9	Give no artificial teats or pacifiers to breastfeeding infants.	V	V	√	<b>V</b>	V	<b>√</b>
10	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	V	Х	×	<b>V</b>	×	Х
A	Code compliance.	V	V		<b>V</b>	V	<b>V</b>
В	Mother-friendly care.	Х	Х	Х	Х	Х	×
С	HIV and infant feeding.	√	X	Х	Х	Х	X
	Hospital has fully implemented the Ten Steps and the expanded components required for designation as "Baby-friendly":	Х	Х	Х	Х	Х	Х

<sup>&</sup>lt;sup>12</sup>Committed to become BF.

# Pass/Fail Summary (continued)

#	Step	Mpika District Hospital	Mwinilunga District Hospital	Luamala
I	Have a written breastfeeding policy that is routinely communicated to all health care staff.	Х	X	Х
2	Train all health care staff in skills necessary to implement this policy.	Х	X	$\sqrt{}$
3	Inform all pregnant women about the benefits and management of breastfeeding.		X	$\sqrt{}$
1	Help mother initiate breastfeeding within a half-hour of birth.		Х	$\sqrt{}$
;	Show mothers how to breastfeed, and to maintain lactation when separated from infant.	Х	Х	$\sqrt{}$
<b>,</b>	Give new-born infants no food or drink other than breast milk, unless medically indicated.	Х	Х	$\sqrt{}$
,	Practice rooming-in — allow mothers and infants to remain together — 24 hours a day.	$\checkmark$	√	$\sqrt{}$
}	Encourage breastfeeding on demand.	Х	√	$\sqrt{}$
)	Give no artificial teats or pacifiers to breastfeeding infants.	V	√	$\sqrt{}$
0	Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.	Х	Х	V
4	Code compliance.	X	√	$\sqrt{}$
3	Mother-friendly care.	X	√	$\sqrt{}$
2	HIV and infant feeding.	X	X	$\sqrt{}$
	Hospital has fully implemented the Ten Steps and the expanded components required for designation as "Baby-friendly":	Х	Х	Х